INTERPRETING ARTEFACTUAL DEPOSITION IN EAST MEDITERRANEAN AND NEAR EASTERN ARCHAEOLOGY.

by

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DECLARATION

I declare that a) this thesis has been composed entirely by myself, b) that the work is my own, and c) that the work contained has not been submitted for any other degree or professional qualification.

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ABSTRACT

This thesis is the outcome of a realisation that, within the East Mediterranean and Near East region, archaeological reconstructions of past societies and of major socio-political and economic transformations are often seriously limited by theoretical and practical shortcomings in the collection, analysis and interpretation of settlement data. In particular, there is a marked failure to account for site formation processes in the interpretation of artefacts and contexts, which is exacerbated by a failure to appreciate the limitations of the functionalism that is intrinsic to archaeological classifications and approaches.

Chapter 2 begins with a review of the history of site formation research and a discussion of some of the biases in this research. The discussion includes a critique of the functionalist tenor of much of the extant work that employs modern values in the estimation of the utility and value of artefacts and materials. This is followed in Chapter 3 by a further critique of past and current theoretical frameworks that have informed archaeological approaches to the use and abandonment of space. Special emphasis is placed on the meanings and associations attached to artefacts and to their treatment on deposition. Chapter 4 outlines a method for the contextual analysis of artefactual deposition.

Chapters 5, 6 and 7 comprise analyses of three case study sites that are used to illustrate the contention that archaeological interpretations of settlement space, which are founded on the assumption of *in situ* deposition and of function, are suspect. It is argued that the examination of the differential treatment of artefacts and of contexts at their abandonment is a more fruitful avenue of investigation. Each of the study sites, while being unique, is considered as representative of other archaeological situations involving burnt open settlements, circumscribed dense built environments and eroded ephemeral occupations.

In Chapter 8, discussion focuses on the implications of this study for wider archaeological understandings of cultures and socio-cultural change. A series of well-known sites and studies from the East Mediterranean and Near East region are briefly considered in the light of the conclusion that the operation of formation processes has a profound affect on the character of the settlement record and, consequently, on archaeological reconstructions of past societies.

This study concludes by advocating recent theoretical developments associated with the post-processual movement. With their focus on, for example, context, meaning, agency, practice and the role of the archaeologist as interpreter, these studies afford new directions for archaeological investigations. Within the East Mediterranean and Near East region, however, new theories have frequently given rise to new interpretations that remain founded on traditional methodologies, theoretical frameworks and assumptions. Thus, with few exceptions, the impact of post-processualism on archaeological practice is, as yet, limited. In order to facilitate the future development of alternative approaches, it is necessary to have a level of accuracy, clarity and transparency in the recording, retrieval and dissemination of information that is frequently lacking for many sites.

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INTRODUCTION

More than thirty years have passed since Ascher's seminal paper, 'Time's arrow and the archaeology of a contemporary community' (1968) that drew attention to the progressive deterioration of the archaeological record over time and provided an added stimulus to an already burgeoning interest in site formation processes. During this time, there has been a growing awareness in some archaeological circles (particularly on the North American continent) of the need to make allowance for the operation of natural and cultural transformation processes in archaeological reconstructions of past human behaviour. As a consequence, there now exists a vast body of literature covering both theoretical and practical approaches to their study (e.g. see **Chapter 2**). However, despite the apparent wealth of archaeological and ethnoarchaeological work that has focussed on various aspects of site formation study there remains a surprising lack of attention paid to their elucidation or appreciation of their influence on mainstream archaeological practice outside America. Within the East Mediterranean and Near East region the neglect of site formation processes is especially marked, outside of the increasing application of geoarchaeological and microstratigraphical approaches.

This observation serves as a starting point for the current work that places great emphasis on the importance of site formation processes in general, and of cultural site formation processes in particular.[1] It is maintained that the action of cultural formation processes (especially those associated with site maintenance, abandonment and re-use) are integral to the archaeological interpretation of artefacts, of artefactual deposition, of contexts and of settlements. Archaeological settlement reconstructions that neglect the impact of site formation processes (natural or cultural) on both contexts and artefactual assemblages are necessarily limited as a result. The majority of modern scholars would probably concur with this point, given the wealth of literature available on the subject. Thus, beyond those studies that ignore site formation processes altogether, are a host of other studies that have noted the work of Schiffer et al. and, consequently, introduced terms such as primary, secondary or de facto refuse into their analyses and discussions; indeed some of the standard classifications found in site formation studies have a wide currency. However, there are few site analyses that progress beyond such straightforward and clear-cut classifications; there are fewer still that demonstrate an appreciation of the implicit assumptions and theoretical foundations that underlie the categories they employ. Invariably, the greatest use is made of those categories that obtain directly to the habitation stage of a settlement's life (e.g. primary or secondary refuse) in order to distinguish between those artefactual assemblages that are *in situ* and those that are not. In this way, site formation classifications become a tool by which to separate material and contexts for the purposes of synchronic spatial analyses that involve the spatial differentiation of activities (e.g. subsistence, craft-

[1] Although the distinction between cultural and natural formation processes was most famously made by Schiffer (1976, 1987), his processualist view is not adhered to in the present work. Instead, cultural formation processes are considered as facets of the wider cultural context of past settlements; they comprise a variety of social practices and should therefore be considered as no less important than activities associated with production and use (see Lucas 2001: 151).

making and storage) and utilise both the architectural and artefactual components of a site. Building on such foundations, many studies frequently have as their ultimate goal the reconstruction of the socio-political and economic organisation of past societies. A further related aim is to document socio-political and economic change; this holds for traditional culture-historical and processual approaches. A similar purpose (and logic) often underlies those studies that invoke divisions between planned and unplanned abandonment, as a precursor to the spatial analysis of artefactual distributions. In both situations site formation processes are generally seen in a negative light; they serve only to distort the living context of an artefact's use (whether a building or an object) and thus the interpretation of past society. With such an attitude, it stands to reason that the ability to categorise deposits as primary, secondary or de facto refuse is invaluable. However, as will be argued later, such classifications are deeply flawed both intellectually and practically, not least because they grossly oversimplify the complexities of formation processes. In particular, formation processes are too often viewed in a mechanistic and generalised way without consideration of the specific socio-cultural or symbolic dimensions of human action. It follows that interpretations of past societies that are built on such foundations are flawed.

The failure to appreciate the true variety of site formation processes is not the sole problem with such approaches. Spatial analyses that seek to reconstruct the socio-economic organisation of settlements by patterning artefact distributions are invariably built on certain assumptions regarding the meaning and value of artefacts and materials themselves. The meaning(s) and value ascribed to an artefact rarely extend beyond modern (Western) notions of utility, efficiency or economic worth. Similar assumptions also underlie existing archaeological and ethnoarchaeological studies into (cultural) formation processes. Thus, while most recognise the function of objects, few studies consider the socio-cultural meanings attached to artefacts (both objects and structures) and to their deposition; meanings that can shift according to context or the biographies of the artefacts involved. And yet, even within our own society artefacts may be invested with a symbolic, social or political significance that can bear little relation to their utilitarian function or their monetary cost. Consequently, the applicability of such modern notions to past societies should be questioned. It is also the case that artefacts exist as both instruments and as signs; they can have both functional purpose and cultural meaning (Maquet 1993: 30; Yentsch and Beaudry 2001: 215-6). It follows that their treatment at deposition may not simply be a matter of convenience or hygiene but rather an act that is invested with socio-cultural significance.

1.2 THE REGION OF INTEREST

It was observed above that within the present study's region of interest, namely the East Mediterranean and Near East, the neglect of site formation processes is especially marked. Furthermore, there exists a marked absence of any critical examination of the limitations of the theoretical and methodological frameworks that are employed. Indeed, in many respects there has been little change in the theoretical and methodological frameworks employed by those working in this region since the days of Kenyon and Braidwood, and certainly since the rise of the New Archaeology in the 1960s. A notable exception is the recent renewal of excavations at Çatalhöyük (Turkey) by Hodder et al. (1997, 2001).

A substantial review of the history of archaeological practice in these areas is beyond the scope of the present work and anything less naturally requires generalisations to be made and important exceptions to be overlooked, nevertheless it is useful to further consider the truth of these statements. For a more detailed survey of the history of archaeological theory and practice the reader is referred to a number of overviews (see, e.g. Laughlin 2000; Lucas 2001; Trigger 1989; Willey and Sabloff 1980). The history of archaeological investigation in the present region of interest is considerable, however a number of individuals (e.g. Petrie, Albright, Kenyon and Braidwood) and schools of thought (e.g. culture-historicism, ecological functionalism and processualism) have had a particularly important influence on mainstream archaeological investigations. Their impact can be traced in existing archaeological methods, classificatory systems and interpretive approaches.

Petrie (1899, 1904) had a profound influence on the development of archaeology in the region (for example, Garstang, the excavator of Jericho and Mersin, and founding Director of both the British School of Archaeology at Jerusalem and the British Institute of Archaeology at Ankara, undertook his first fieldwork with Petrie in Egypt). Although Egypt was the main focus of Petrie's work, he made a particularly important contribution to Levantine archaeology as, recognizing that tells were essentially artificial mounds created by successive occupations, he was one of the first to undertake a Tell excavation in the Levant (Tell el-Hesy (Lachish) in 1890). A particular feature of Petrie's work was the emphasis he placed on site plans and the central role he allotted to pottery typologies in the establishment of relative chronologies that were linked to Egyptian chronology. His typological methods were integral to the early and lasting formulation of a historical chronology for the region.

A feature of early archaeological investigations in the East Mediterranean and Near East was the link between the existence of historical sources and archaeological endeavour. Thus many of the early scholars were attracted to the region by biblical or other (e.g. Schliemann's (1875, 1878, 1880, 1883) investigations at Troy and Mycenae or Woolley's (1965: 27) interest in 'The Flood') accounts. Within the Levant, the 1920s and 30s witnessed a (American led) growth of interest in ancient biblical (Old Testament) sites. Albright (see, e.g. Albright 1935, 1938a-b, 1939, 1943a-b, 1953, 1964, 1971), in particular, was an influential figure in the development of biblical archaeology. His excavations at a number of settlement sites in the southern Levant, his work in establishing a chronology for the region (using stratigraphic and pottery sequences from his excavations at Tell Beit Mirsim) and his efforts to clarify biblical-historical issues using archaeological evidence had a lasting impact on later archaeological practice. As a protégé of Albright, Wright (excavator of Shechem) provided further impetus to the development of a biblical archaeology (he also founded the periodical *The Biblical Archaeologist* in 1938). The excavation technique advocated by these two scholars promoted the wide-scale exposure of complete architectural units and became known as the Albright-Wright method. More significant, however, was the close relationship between biblical studies and archaeology. Thus, for example, Wright (1950, 1957, 1961, 1965, 1969) was at once a biblical scholar and an archaeologist; indeed, seminaries and church affiliated schools funded many of the excavations carried out in the region during the 1920s and 30s (Laughlin 2000: 14, 17). Albright and Wright enjoyed long careers and their theoretical and methodological influence remained significant into the 1960s. However, from the 1970s on, according to Dever (1990), who was himself a student of Wright, American archaeology in the bible lands has become increasingly secular as a result of various influences (e.g. processualism, contact with foreign (European) projects, secular funding bodies). Nevertheless, it should be noted that some Israeli archaeologists maintain close links between archaeology and biblical history; the Albright-Wright method of excavation also lives on (for informative summaries of Israeli archaeology see, e.g.. Ussishkin 1982 and Mazar 1988). The importance of historical texts to wider archaeological practice is not explored further here, but it is worth noting the value that has been attached to such records and to the recovery of ancient documents. Indeed, textual sources continue to play an important role in archaeological practice and interpretation (see, e.g. a number of papers in Veenhof 1996). While historical sources have inspired both archaeological investigation and interpretation in the past; it is arguably the case that - at the same time – they have constrained the independent development of archaeology as a discipline.

In Europe, Wheeler (1954) was a vocal advocate of modern three-dimensional excavation and recording from the 1930's, inspiring a generation of archaeologists (Trigger 1989: 288). Following World War II, Kenyon (1953, 1957, 1960, 1974) had a marked influence on archaeological (particularly British) practice in the Levant; indeed, her excavations at Jericho (1950s) and Jerusalem (1960s) provided a training ground for many young scholars. She introduced the Wheeler-Kenyon Method that emphasized the vertical (stratigraphic) dimension through the analysis of earth layers and their contents (and ran slightly counter to the Albright-Wright method mentioned above). This focus on stratigraphy afforded chronological understandings and was closely linked to the development of the culture-group concept (see, e.g. Barker 1982: 15; Harris 1989: 11; Lucas 2001: 45).

The 1930s and 40s also witnessed the growing popularity of functionalist and ecological approaches in mainstream archaeology and anthropology most notably in the work of Clark (1939) in Britain, and Steward (1937) and Taylor (1948) in North America (see also Bennett 1943, 1944). These approaches represented a shift in focus from culture-historical concerns with the definition of cultural groups and explanations of culture change in terms of diffusion or natural catastrophe. Greater emphasis was placed on the characterisation of human behaviour, the internal configurations of past societies and on the internal causes for social change or evolution. Archaeological cultures were conceived of as systems composed of interrelated and interdependent subsystems. This conception of human society encouraged archaeologists to parcel up the past and to limit their investigations (and questions) to specific fields. Particular interest was directed to the environmental, economic and technological conditions enjoyed by past human groups. These developments in turn impacted on archaeological research in the present region of interest. Thus, the late 1940s witnessed the commencement of Braidwood's Iraqi-Jarmo Project (1960, 1974). Inspired by trends in American anthropology, Braidwood implemented an ecological approach to the investigation of the origins of agriculture and sedentism. His team was multidisciplinary and set the benchmark for new more scientific investigations of archaeological sites and their environs. Hole, Flannery and Neely's (1969) influential investigations in the Deh Luran plain (Iran) during the 1960s were similarly directed to the investigation of the cultural ecology of early farming communities. Interestingly, these latter attack traditional cultural-historical explanations for cultural change with their frequent invocation of catastrophes (or migration, invasion, famine or warfare) and argue that 'each regional development must be seen in its own light' as 'internal, "adaptive" change' was invariably the rule (ibid.: 5). A feature of the ecological approach was its concern with the environmental conditions enjoyed by archaeological sites (ecological zones); indeed, environment and economy were considered key factors in the form, character and development of societies.

The promotion of a more holistic and multidisciplinary approach, and the utilisation of new methods foreshadowed the processualist approaches of the 1960s and 70s. Certainly, the emphasis on culture change as an adaptive response to ecological conditions is in keeping with the cultural-ecology of White and Steward (1937, 1953) that was adopted by Binford and American New Archaeology. Functionalism was also intrinsic to processualism conception of human behaviour and of cultures as systems. Significantly the American New Archaeology conceived of archaeology as an anthropological science, it attacked traditional historical approaches, promoted an explanatory approach to the investigation of culture processes and argued for the archaeologist to assume the role of objective observer of past human behaviour (see, e.g. Binford 1965, 1968, 1972; see Johnson 1999 for an overview). In many ways, the New Archaeology's definition of the archaeologist's role echoes Taylor's (1948: 43) own concept of archaeologist as 'really nothing but a technician' using 'a method and a set of specialised techniques'. Nevertheless, the concern with documenting human behaviour marked something of a departure from the interest of more traditional (culture-historical) archaeologists who remained concerned with mapping cultures and their evolution (although evolutionary thinking remained central to frequently used cross-cultural categories such as band, tribe or chiefdom). With processualism there was also a growth in interest in ethnography and a development of ethnoarchaeology (see, e.g. Kramer 1979, 1982; Watson 1979) within the Near East region that had an influence on the investigation and interpretation of a number of archaeological sites (see, e.g. Daviau 1993; Voigt 1983; see also **section 8.4**).

Associated with the processualist school is the development of an interest in site formation processes (Schiffer 1972, 1976, 1987; see also Binford 1981a). A review of site formation research follows in the next chapter, however a survey of archaeological practice in the East Mediterranean and Near East regions reveals that, despite the work of Schiffer et al., there has been relatively little research into site formation processes, particularly into cultural site formation processes. In the main, greater attention has been paid to the study of natural agencies.

There has been considerable criticism made of processualist approaches over the last two decades (see, e.g. Hodder 1982b, 1991a; Shanks and Hodder 1995: 8-9). For present purposes it is necessary only to highlight areas of particular weakness. One such area of weakness is the positivistic assumption that there are universal laws of human behaviour and that these can be established through the rigorous scientific study of archaeological materials and the use of ethnoarchaeological analogies (although Binford's development of middle range theory was designed to avoid uncritical and unsuitable use of ethnoarchaeological examples in the explication of past human behaviour). This belief in the existence of general laws underlying human behaviour denied both the variety of cultural expression and the contingent (historically, culturally and socially) nature of human action. The conception of archaeology as an empirical science, and of the archaeologist as a passive (unbiased) observer has also been widely criticised. Furthermore, cultural-ecology's definition of culture/society as adaptive and the use of models of cultural evolution are disputed.

And yet, in the present post-processualist era there has been little significant change in (Anglo-American) archaeological practice or reporting in the East Mediterranean and Near East region; the chief impact has been at the interpretive level only. The most significant exception is Hodder et al.'s current investigations at Çatalhöyük. As a major proponent of post-processualism, Hodder's concern with context (and use of text as a metaphor), agency, meaning, and his appreciation of the theory-laden character of archaeological data all run counter to traditional and processualist agendas (see e.g. 1982a-b, 1991a). At Çatalhöyük, he is actively engaged in the questioning of current methodologies and the formulation of a new reflexive approach (1997; 2001; see also Chadwick 1998; for criticism see Hassan 1997). According to Hodder, the reflexive approach requires the "examination of archaeological assumptions and actions on the various communities involved in an archaeological process" (2001: 9). There are three other central tenets to his approach, namely: 1) the meaning of objects and contexts is relational; 2) the archaeological process should be interactive (enabling archaeological interpretations to be interrogated as they are being made); and 3), there is a need for multivocality in archaeological interpretation (ibid.). While in theory this marks a welcome development, it is arguably the case that the benefits of the new approach are yet to be realised. Similarly, the impact of the Çatalhöyük project on others is also yet to be seen.

Having given such a fleeting review of archaeological practice in the East Mediterranean and Near East it is useful to underline the lasting contribution that past approaches have made to archaeology in the region. Thus, typologies and classificatory techniques persist in archaeology. In combination with Wheeler and Kenyon's emphasis on stratigraphy, typological classifications also formed the building blocks for the formulation of the culture groups that continue to be discussed and studied today. The ecological approaches of Braidwood et al. and the processualism of the New Archaeology have also had a lasting influence, both methodologically and theoretically. Most notably, the culture-ecologist and processualist scholars directed their attention to early prehistory and to the study of the origins of agriculture and sedentism (see **section 8.4**). Their legacy continues in the study of the use of space, research into activity areas, the use of ethnographic and ethnoarchaeological analogies and the particular concern with economy, environment and technology that is often witnessed in archaeological reports on prehistoric sites (e.g. Daviau 1993; Voigt 1983). Indeed, it is arguably the case that the very nature of reporting on early prehistoric sites reflects the continuing persistence of mid-20th-Century concerns that prioritise economy and technology (see, e.g. Moore et al. 2000). As a caveat to this, however, a number of scholars have suggested that the significance of the social and symbolic impetuses behind the transition to farming should not be underestimated (see, e.g. Bender 1978; Cauvin 1994; Hodder 1990; Watkins 1990, 1992).

Clearly, with few exceptions (e.g. the work in progress at Çatalhöyük), it remains the case that mainstream archaeological research in the East Mediterranean and Near East continues to uncritically employ the theoretical and methodological frameworks of earlier periods. In addition, scholars also continue to neglect the impact of site formation processes on the archaeological record. This is a situation that needs to be addressed, as the failure to realise the theory-laden character of archaeological data and to consider the impact of formation processes necessarily has profound implications for interpretations that are based on settlement data.

1.3 CASE STUDIES

This study involves a cross-cultural consideration of the impact of cultural site formation processes, and of archaeological approaches to the study of artefactual deposition, on reconstructions of past human activity.

The material for analysis in the present work is taken from three sites in the East Mediterranean and Near East region, namely: Tell Sabi Abyad (Syria), Tell Jerablus Tahtani (Syria) and Kissonerga-Mylouthkia (Cyprus) (**Figure 1**). The utilisation of three very different sites is designed to illustrate something of the manifest variety of contexts and artefactual assemblages; more particularly it is designed to illustrate the contextual and cultural specificity of human actions as they obtain particularly to the deposition of artefacts. However, there is a further rationale behind the selection of these particular sites. Although each of the case study sites is unique and presents culturally and contextually specific problems for archaeological analyses and understandings, they are also intended to be representative of particular archaeological situations that might include sites of analogous period and/or character. For example, Late Neolithic Tell Sabi Abyad represents a multiperiod open settlement site with a heavily burnt occupation horizon that has yielded a remarkably rich and diverse artefactual assemblage. The character of the built environment has invited links to be made between architectural form and socio-economic organisation; it is the burnt nature of the deposits that has particularly fuelled such interpretations. And yet, it will be argued that the assumption of a Pompeii scenario is a false one; an argument that has implications for the investigation of burnt contexts elsewhere (see, e.g. Myrtos, as discussed in **section 8.4**).

In contrast to Tell Sabi Abyad, Tell Jerablus Tahtani (particularly the Early Bronze Age fort occupations) comprises a small third millennium BC site that lies in the shadow of a much larger urban site (Carchemish), is characterised by closely packed architecture and is circumscribed by a fortification wall. Such sites are common in the region: for example, there are many along the Upper Euphrates in northern Syria alone (see, e.g. **Figure 40**). Material from Uruk and Early Bronze Age occupations thus afford an opportunity to consider the character of artefactual deposition during periods that are commonly associated with significant (even revolutionary) socio-political and economic developments.

Finally, Kissonerga-Mylouthkia comprises an eroded and more ephemeral site that is largely composed of negative features. As such it presents considerable analytical and interpretive challenges. And yet such sites, particularly during early prehistory, are not uncommon in the archaeology of the region; consequently, the problems that Kissonerga-Mylouthkia presents might be considered akin to those encountered at other sites of a similar character.

1.3 THESIS OUTLINE

This thesis begins, in Chapter 2, with a review of the history of site formation research. The origins and development of scholarly interest in site formation processes are considered and the standard terminology is defined. Particular mention is made of Schiffer by virtue of his prolific literature on the subject (as a 'founding father' of the Behavioral School) and cultural formation processes are dealt with in greater length than are natural processes as these form the main focus of the present analysis. This chapter concludes with a discussion of some of the biases in site formation research and a critique of the functionalist tenor of much of the extant work.

In Chapter 3, there follows a critique of the past theoretical frameworks that have informed archaeological approaches to the use and abandonment of space. To some extent this naturally builds on Chapter 2 by beginning with a criticism of processual approaches to spatial analysis that are founded on functionalist reasoning regarding the use of artefacts and of space. However, this chapter goes further by investigating structuralist and post-processualist approaches to the interpretation of settlement space (and the identification of 'places') and artefactual deposition. The general neglect of site formation processes in many such approaches is lamented. Furthermore, it is observed that many of the methods and models used in recent post-processual approaches are built on earlier processual foundations. These two realisations prompt a brief reappraisal of archaeological notions of space and more particularly of artefactual deposition. The meanings of artefacts (in their prime and at their discard) are investigated beyond their function or economic worth in order to underline the contention that existing site formation studies and spatial analyses underestimate the interpretive value of artefactual refuse.

Chapter 4 sets out the analytical method employed by highlighting a number of studies as sources for the approaches that are adopted in the present study. A key feature of the analysis is that it comprises a multivariate approach to both artefacts and their contexts of recovery; subsequently, the contextual and artefactual variables for analysis are given their definition in Chapter 4. Artefactual variables include broad categories of artefact function, artefact condition, material of manufacture and size. A number of the variables are shared with existing studies of site formation, including those studies that fall under the criticism directed against functionalist and other theoretical approaches set out in Chapters 2 and 3.

Chapters 5 (Tell Sabi Abyad), 6 (Jerablus Tahtani) and 7 (Kissonerga Mylouthkia) comprise the main analysis chapters and they are designed to exist in a self-contained way. Each is a distinct case study and each requires flexibility in the utilisation of the method set out in Chapter 4. Within these separate analytical chapters, site histories, related research and individual artefactual or contextual considerations are rehearsed prior to the contextual analysis of artefactual deposition. Each chapter is also concluded by a discussion of results in terms of their implication at both the local intrasite and intersite levels. In this way, each site, while being unique, is still held as being representative of other archaeological situations involving burnt open settlements, circumscribed dense built environments and eroded ephemeral occupations.

Chapter 8 constitutes the main discursive chapter wherein the preliminary chapters concerning the literature of site formation processes, the theories behind their study (and the study of the use and abandonment of space) and the results of the preceding analysis chapters are considered. Discussion focuses on the importance and variety of cultural site formation processes and of the meanings attached to artefactual deposition, particularly regarding the reconstructions of the use and abandonment of sites. In establishing the importance of site formation processes and the need to entertain the possibility of there being a multiplicity of meanings inherent in artefacts and their intentional (or even their unintentional) deposition, this discussion is then opened up to a wider debate that focuses on the implication of this study for archaeological interpretations of cultures and socio-cultural change. In essence, it is argued that the operation of cultural formation processes has a profound effect on the character of the settlement record; consequently, archaeological reconstructions of cultures that are founded on the latter are affected. A series of examples are employed to illustrate this argument.

In concluding this thesis, it will be argued that the elucidation of cultural formation processes, the questioning of theoretical frameworks (underlying many existing site formation studies and spatial analyses) and the recognition of the agency of both people and things can positively contribute to archaeological interpretations of material culture, cultural entities and socio-cultural change.

CHAPTER 2

THE STUDY OF SITE FORMATION PROCESSES

2.1 INTRODUCTION

As outlined in the preceding introductory chapter, a chief aim of this study is to assess the impact of site maintenance procedures and abandonment behaviours on artefactual deposition and the reconstruction of the past. As a foundation to the following chapters on theory (Chapter 3) and method (Chapter 4), that form the basis of the later analysis chapters (Chapters 5, 6 and 7), there follows a brief review of the history of site formation studies.

To begin, a general background to the origin and development of site formation research is provided that contains a sub-section on the important contribution of ethnoarchaeology and ethnography to the discipline of archaeology. This is followed by a number of separate sections that deal with aspects of archaeological and ethnoarchaeological research into the numerous processes that are associated with the phases of habitation, abandonment and post-abandonment of settlements (also known as 'pre-abandonment, abandonment and post-abandonment stages (Deal 1985)). Particular reference is made – where possible – to studies that have taken place in the East Mediterranean and Near East. Finally, in conclusion, a number of the key methodological and theoretical principles displayed in such studies are drawn together in the discussion of problems of equifinality and as a precursor to wider discussion in Chapter 3 of archaeological assumptions (methodological and theoretical).

2.2.1 A BRIEF HISTORY

The study of site formation processes presents a large and wide-ranging subject area that has produced a considerable body of literature. In consequence, it has been necessary to be selective in the canvas of this review. Given that the present study's principal focus is on cultural formation processes this chapter will be largely devoted to their discussion. Natural formation processes (taphonomy) will be referred to only in passing.

A number of scholars have made significant contributions to the study of site formation processes and the effect of these processes on the structure, composition and condition of artefactual assemblages (e.g. Binford 1979, 1980; Cameron and Tomka 1993; Nash and Petraglia 1987; Schiffer 1972, 1976, 1987; Wood and Johnson 1978). Arguably, this has resulted in a situation whereby few modern studies of artefacts by context and spatial distribution can afford not to provide at least some passing mention of site formation processes without being perceived as being incomplete and ultimately undermined by their neglect. Nevertheless, the study of site formation processes is a relatively recent contribution to the discipline of archaeology.

At the beginning of the 1960's, Ascher (1961) was one of the earliest to draw attention to the existence of site formation processes in general and the need for archaeologists to take them into account in inference (see Schiffer 1987: 8-9). It was in 1968, that he famously argued that "time's arrow" progressively reduced the quantity and quality of the evidence surviving in the archaeological record. Following Ascher's early lead, archaeologists became increasingly aware that the context of an artefact's manufacture, use and discard were often different and that such differing contexts were often differentially preserved in the record. The realisation came that archaeological sites were distorted or destroyed by subsequent human activity and natural processes. In consequence, it became increasingly imperative for archaeologists to consider the impact of human and natural agencies on the archaeological record in order to reach an understanding of its limitations and significance. Concomitant with such a realisation was the growing appreciation that archaeologists themselves individually influence the recovery of information (see Collins (1975: 29) concerning 'sampling bias'). The principal development of interest in site formation processes took place within the context of the New Archaeology movement of the 1960's and 1970's. It is in America, in particular, that the most significant advances in their study have been made. However first a word will be said regarding early interest in site formation processes demonstrated by New Archaeology on this side of the Atlantic.

In Britain, Clarke in his seminal paper 'Archaeology: the loss of innocence' (1973) was the first to call for a general systematisation of archaeological theory that related archaeological remains to human behaviour. According to Clarke (1973: 17),

> Archaeology in essence... is the discipline with the theory and practice for the recovery of unobservable hominid behaviour patterns from indirect traces in bad samples.

In making such a statement it is apparent that he recognised that there were limitations inherent in the archaeological record but believed that through the rigorous attention to archaeological theory and practice these could be reduced and their impact accounted for. With this in mind, Clarke set out five main bodies of theory intuitively employed by archaeologists in their "interpretative leaps from excavated data to the written report" (1973: 16). The first were pre-depositional and depositional theory (included together) that covered the relation between "specified hominid activities", social patterns and environmental factors with each other and the remains deposited in the archaeological record (ibid.). The second, (post-depositional theory) relates to the natural and human processes that affect the archaeological record (e.g. "recycling, movement, disturbance, erosion, transformation or destruction" (ibid.)). The third, retrieval theory, concerns the relationships between what survives and what is recovered in the archaeological record and encompasses collection and excavation strategies. The fourth, analytical theory concerns the treatment and analysis of data that is recovered and includes modelling, typological and experimental studies. Finally, interpretative theory defined as that body of theory that deals with relations between analytical level and the directly unobservable behavioural and environmental patterns (see also Trigger 1989: 359).

Clarke's attention was chiefly directed to elucidating analytical and interpretative bodies of theory. Although his categories of Pre-depositional, Depositional and Post-depositional theory encompass issues that are of particular relevance to this study, he did little to elaborate or illustrate these bodies of theory or devise methods for their analysis and interpretation. Nevertheless, the framework set out by Clarke is of interest in its partition of different levels of theory that illustrates the New Archaeology of the day and its separation of facts and data from interpretation (for commentary on various aspects of New archaeology see, for example, Johnson 1999; Trigger 1989).

Broadly contemporary but different developments were taking place on the other side of the Atlantic in relation to a growing interest in site formation processes. In 1972, Schiffer famously made the clear distinction between the systemic context of use and the archaeological context of discovery and recovery. According to Schiffer, the archaeological record is necessarily a distorted reflection of past behavioural systems as a result of the operation of both sets of (cultural and natural) processes (see also Trigger 1989: 359-61 for a useful summary of Schiffer's contribution). Archaeological data was considered to consist of "materials in static relations", produced by cultural systems and subsequently "subjected to the operation of non-cultural processes" (Schiffer 1976: 12). In consequence, the interpretation of archaeological materials required an account to be made of those site formation processes that determined how material was transferred from the systemic to an archaeological context and what happened to that material in the archaeological record (Schiffer 1972; 1987: 3-4).

Schiffer was optimistic that the distortions caused by site formation processes could be overcome by archaeologists through the proper study of the way artefacts functioned in the systemic context, the way they entered the record and the way they were altered (Schiffer 1976, 1987). To quote from his Preface to *Formation Processes of the Archaeological Record*, Schiffer states that his book

> ...embodies the vision that the cultural past is knowable, but only when the nature of the evidence is thoroughly understood. In contrast to Behavioral Archaeology, the present work shows how one can make the past accessible in practice by identifying and taking into account the variability introduced into the archaeological record by formation processes. (1987: xx)

In other words, Schiffer held the view that the reconstruction of the past (the systemic context) was an achievable goal. In Schiffer's own words "the distortions [in the archaeological record created by transformation processes] can be rectified using the appropriate analytic and inferential tools built upon our knowledge of the laws governing these processes" (Schiffer 1987: 10; also 1976: 12). This faith in the archaeologist's ability to fully understand the impact of formation processes on their reconstructions was afforded by the belief that the operation of formation processes on the record of any given site had "predictable consequences" (Schiffer 1987: 10). This predictability rested on the assumption that formation processes were highly regular in their causes and effects (a nomothetic conception of formation processes akin to Clarke's theory of archaeology) (Schiffer 1987: 10, 23;

Clarke 1973). Such a belief reveals the positivist character of Schiffer's theoretical position and reflects the spirit also of the New Archaeology movement of the 1960's and 70's.

In the course of his work, Schiffer has identified and defined a variety of site formation processes that impact on artefacts and deposits at deposition and post-depositionally (1972, 1976, 1983, 1987; see also LaMotta and Schiffer 1999). Indeed, Schiffer may be considered responsible for many of the terminological and theoretical frameworks employed by researchers in the study site formation processes over the last three decades. In the first instance, Schiffer made a clear distinction between cultural and non-cultural (natural) depositional and post-depositional processes that affect site formation, a distinction that is commonly adhered to in archaeological literature and will be adhered to below. These processes he synthesised within his framework of 'transformation theory' that made the division between cultural (C) and natural (N) transforms (Schiffer 1987: XIX). These transform and distort the archaeological record in four ways namely: formally, spatially, quantitatively and relationally. In other words, they influence the composition, content and distribution of all artefactual assemblages and contexts.

The manifest natural formation processes that transform the archaeological record include running water, gravity movements, wind deflation, and animal activity in the soil (Schiffer 1987; see also Butzer 1982; Goldberg et al. 1993; Wood and Johnson 1978; South 1979; Rosen 1986: 92; Stein 1983 to name but a few). Considerable attention has been paid to their investigation and definition and they are referred to again below (see **section 2.4**). However, as mentioned above, this study will concentrate on culturally derived formation and transformation processes. These latter include various site maintenance activities such as sweeping, and dumping of refuse (after Rosen 1986; Schiffer 1983; Wilk and Schiffer 1979; Bradley and Fulford 1980; Deal 1985). They also include other aspects of cultural deposition, such as accidental loss or deliberate caching and burial. A number of post-depositional processes or events are likewise included under the banner of cultural formation processes (e.g. scavenging, collecting, quarrying and trampling). Further definition and consideration is given to these processes below (see **section 2.3**).

In addition to defining a range of different site formation processes, Schiffer has also advocated a variety of methods for analysing discard. These have included ethnographic and ethnoarchaeological study of recent and still living populations to understand the processes at work and draw conclusions that might prove analogous to more ancient archaeological situations. A number of such studies are referred to in the following section. Worthy of a final mention here, however, is another well-known product of Schiffer's and other like-minded scholars' positive belief in archaeologist's ability to pattern the impact of site formation processes, namely the "discard equation". The "discard equation", in all its various forms, comprises a statistical attempt to predict the relationship between many variables including duration of occupation, population and accumulation rates. Baumhoff and Heizer (1959) were the first to note the relationships between counts of ceramic vessels used by a group, duration of site occupation and rates of discard. A number of other researchers – Schiffer included – have since proposed equations for the frequencies of artefacts in archaeological assemblages to systemic assemblages, use-lives of artefacts and the duration site occupation (David 1972: 142; Schiffer 1976: 60; Schiffer 1987; de Barros 1982: 310). Indeed, the discard equation as a concept remains extant and has been applied in many accumulation studies (e.g. Lightfoot 1993; Mills 1989; Pauketat 1989), particularly in relation to studies of the "Clarke Effect" that evaluate how the duration of occupation affects the relative frequencies of artefact types (David 1972; David and Henning 1972; de Barros 1982; Deboer 1974, 1985; Mills 1989; Schlanger 1990, 1991; Varien and Potter 1997: 195). The discard equation in all its various forms is characteristic of the belief of archaeologists in the predictability of formation processes.

A feature of Schiffer's work and that of others investigating the impact of site formation processes on the archaeological record has been the significant contribution of ethnography and ethnoarchaeology to the identification and understanding of the complexity and variety of these processes. There follows a section considering the importance of ethnographic and ethnoarchaeological research to current understandings of site maintenance and abandonment processes.

2.2.2 THE CONTRIBUTION OF ETHNOGRAPHY AND ETHNOARCHAEOLOGY

There has been an extensive ethnoarchaeological and ethnographic literature devoted to the study of discard practices amongst various indigenous peoples supporting the claim that formation processes create a biased record (e.g. Binford 1978, 1981b; Deal 1985; Deboer and Lathrap 1979; Gould 1978: 259; Hayden and Cannon 1983; Kent 1984; Murray 1980; Schiffer 1975; Stevenson 1982, 1985; Stiles 1977; Yellen 1977). These studies have significantly contributed to the study of formation processes, particularly to archaeological understanding of the cultural formation processes, including both site habitation and abandonment processes as discussed in separate sections below.

Many studies have been directed to the understanding of hunter-gatherer encampments (e.g. Binford 1977b, 1980; Stevenson 1985). For example, advocating a middle range approach, Binford's ethnoarchaeological studies regarding spatial mobility, duration of occupation, and assemblage composition have demonstrated that length of occupation could have directly effected the composition and diversity of artefact assemblages within a stratigraphic feature, or between features (Binford 1979, 1980, 1982).

There have also been studies directed to the investigation of sedentary indigenous populations. For example, Hayden and Cannon's (1983) study of refuse disposal in the Mayan Highlands has raised some interesting points for discussion later in this study. In particular, they noted that structure of refuse disposal on Mayan sites was influenced by three main factors, namely: "economy of effort, potential value of refuse, and potential hindrance by refuse" (1983: 117). The first of these is covered by Schiffer's (1977: 21) and Green's (1961) suggestion that "convenience" played an important role in refuse disposal (Hayden and Cannon 1983: 119). All three factors reflect the emphasis placed by certain archaeologists on both economic (e.g. regarding labour costs, worth or transport costs) and practical (e.g. obstructive properties of artefacts) considerations. In their conclusions, Hayden and Cannon note that a number of "randomising and dispersive" processes worked on refuse, particularly that placed in a provisional discard location (ibid.: 154). Furthermore, they conclude that refuse was "differentially treated according to size and type" and that "artefacts found on archaeological living floors most likely represent items that had been in a state of discard in the systemic (manufacturing and use) context" (ibid.: 157, 159). This latter point is of interest in the light of contradictory conclusions from abandonment studies that have demonstrated that artefacts found on floors of abandoned sites seldom can be conclusively deemed *in situ* (e.g. Murray 1980; Graham 1993; Lightfoot 1993). Other studies have been directed to the study of pastoral transhumant shelters and documented the shifts in use and reuse of structures and the impact that these changes have on the composition and content of artefactual assemblages (e.g. Creighton and Segui 1998). Still others have involved studies of modern refuse practices (e.g. Rathje 1974; Rathje and McCarthy 1977).

Finally, some ethnoarchaeological studies have dealt more specifically with aspects of behaviour associated with the abandonment and immediate post-abandonment stages of sites. Binford, for example has demonstrated the significance of curation of artefacts at the time of abandonment (1973; see also Schiffer 1987). Others have focussed on abandonment processes themselves (Cameron and Tomka 1993; Joyce and Johannessen 1987, 1993; Lange and Rydberg 1972; Murray 1980; Schiffer 1987; Stevenson 1982). Such studies illustrate the growth of academic interest in abandonment and these are of particular interest to the present study; subsequently, a number will be referred to again in later sections.

2.3 TERMINOLOGY AND DEFINITIONS

The preceding section briefly reviewed the history of scholarly interest in the study of site formation processes. In this section, there follows a more detailed consideration and definition of the variety of discard, disposal, abandonment, reclamation, disturbance and retrieval processes. These processes are considered below in separate sections on site maintenance procedures operating during the habitation of the site, site abandonment behaviour and post abandonment activity.

2.3.1 SITE MAINTENANCE PROCESSES

Site maintenance processes (or procedures) are considered to operate continuously during the occupation of a structure or settlement (the habitation phase). According to Binford,

> ...site maintenance involves at least two kinds of tactics: (1) *preventive maintenance* (the disposal of items away from intensively used spaces) and (2) *post hoc maintenance* (the actual cleaning up of areas and the transport of the debris collected to special dumping areas). (1983: 189 - his italics; see also Needham and Spence 1997: 85)

Within the context of heavily built-up environments, such as existed on many Tell sites, it might be expected that both tactics operated; although their identification might prove problematic, reliant as it is on excavation and recovery of evidence of the cleaning of intensively used spaces and also of dumps of material. Retrieval strategies for the recovery of microdebitage and methodologies such as microstratigraphical analyses of surfaces can doubtless elucidate such activities, however these are often sparingly applied. Furthermore, one vital component of site maintenance strategies, the midden or dump, is often understudied and under valued, where or if it ever existed (as material might well have been dispersed over fields for example). In some cases, as at Brak or Ur, only certain finds (e.g. seals and seal impressions) are studied from such contexts and these are usually divorced from other features of the middens and their assemblages.

Schiffer has distinguished three main categories of refuse disposal relating to habitation phase, namely: primary, secondary, and provisional (Schiffer 1972, 1976, 1987; Needham and Spence 1997: 77). Below there follows a definition of each of these together with, in some cases, reference to literature and case studies that are of particular interest to the present study where they refer to possible characteristics to facilitate identification. Prior to the definition of the three main habitation stage discard categories however it is important to note in passing that there are other deliberate accretion processes that might take place in a settlement during habitation (and also during abandonment and post abandonment phases) for example, ritual caching or hoarding and burial (acts of structured-deposition). These are amongst the most straightforward episodic disposal activities to recognise in the record.

Contrary to Schiffer's early classifications and descriptions (e.g 1976, 1987) that included *de facto* and *abandonment stage* refuse (see below for definitions; the latter are also to be found summarised in **Table 1**) with the three aforementioned disposal modes these will be considered later within a separate section dealing with abandonment behaviour.

Primary refuse

This operates as an accretion process and represents objects and artefactual material deposited in the context or locus of their use (Schiffer 1976, 1987; LaMotta and Schiffer 1999). However, the successful identification of such straightforward relationships between assemblage character and activity can only result from cases where artefact use and discard coincide spatially and temporally, and in which only one activity is represented. Although, primary deposition would provide the strongest evidence of activity a number of studies have demonstrated that it occurs rarely (e.g. Murray 1980). Indeed, some scholars would suggest that the term *in situ* as it is used to describe undisturbed artefacts in a locus of primary deposition is probably more an act of optimism than realism (e.g. Wood and Johnson 1978: 317).

Operating with such intentional acts of primary deposition are those of a more inadvertent – but nevertheless primary – nature, such as loss. Following Schiffer (1987: 77) there are five chief variables influencing loss (and in turn retrieval rates). First, size and mass are of key importance;

second, "the formal properties of objects" (e.g. colour, shape, and texture); third the "character of the surface" on which deposits are used and; fourth, the value or replacement cost of object effects the effort put into searching. Lastly, the mobility of an object (its portability) effects loss rates. In general the interpretation of loss is reliant on assessment of the aforementioned variables and the conclusion that the object still had a use or value and therefore would not have been deliberately discarded.

A number of factors affect whether or not material remains in its primary locus of use. For example, factors related to the obstructive or odorous and 'unhygienic' attributes of refuse would impact on whether or not refuse was removed from its initial place of use or deposition (see Hayden and Cannon 1983). In addition, following the tenets of the 'McKellar hypothesis', remaining primary refuse would most likely include small objects that have escaped cleaning procedures (LaMotta and Schiffer 1999: 20; McKellar 1983; Schiffer 1976: 66-7, 1983: 694-5; Tani 1995). Schiffer has also observed that the penetrability of the floor matrix would have an impact on the whether or not refuse remained in its primary locus of production (1976: 126-8).

Within heavily occupied multi-period sites like Tell settlements, primary refuse contexts are unlikely to be identified on the basis of the distribution of artefacts alone (as distinct from microdebitage for example) as in most contexts (particularly in buildings and built spaces) maintenance procedures were constantly at work. It is largely the case that only the smaller objects will have been overlooked, assisted perhaps by the penetrability of the silt floor matrix (see Verhoeven 1999: 36). It has been argued that primary refuse contexts within built environments might be entertained in circumstances of sudden and catastrophic destructions such as that which has been posited for Upper Level 6 at Sabi Abyad where a "Pompeii-like" scenario may be entertained (see Schiffer 1985; see also Binford 1981a for *contra* arguments). However, even in such circumstances the direct link made from destruction to primary deposition to *in situ* activity to the use and function of space is questionable (e.g. see **sections 2.3.2** and **2.3.3** below; see also **Chapters 3 and 5**).

Secondary refuse

Secondary deposition has been referred to as depletion process in that it covers the action of removing artefactual material away from their primary context of use and generation (c.f. Needham and Spence 1997) for deposition in other contexts such as middens, landfill sites, abandoned structures or cemeteries. This occurs as a result of the maintenance activities conducted on site (included in this class are Deal's (1985) separate categories of 'maintenance disposal' and 'dumping disposal'). A number of ethnographic studies have illustrated the action of secondary deposition (e.g. Clark 1991).

Secondary refuse deposition, such as envisaged for the deliberate deposition of artefacts in 'dumps', can often produce deposits containing associated artefacts that were not intimately connected in the living context of their use (Schiffer 1987: 281). Through the removal and 'dumping' of refuse, a clustering of objects can occur in middens and locations that are 'out of the way' such as pits or abandoned structures. Such clusters bear no reflection on *in situ* activity. In the case of the features identified as 'dumps' the functional association both between the individual parts of the assemblage, and between the context of recovery and that of use is arguably further removed. In addition, as 'dumps' they are also subject to interference and recutting activity (possibly through quarrying for building material) that mixes deposits in antiquity and conceivably resulted in the recycling of artefacts. Furthermore, it is common for infilled pits (e.g. as at Kissonerga-Mylouthkia) and ditches to contain a mixture of deposits that are the product of cultural activities and of natural erosion. The limitations of midden deposits, as the classic products of secondary deposition, are clear as they obtain to the reconstruction of the systemic inventory of a site or of *in situ* activities. However, ancient middens should not be confused with our modern concepts of rubbish collection and of dumping on landfill sites. Instead, they provide opportunities for the study and interpretation of various issues relating, for example, to the economy, processing activities, site maintenance activity and other social practices (see **section 2.6** below).

A further problem with such midden features or areas in particular concerns the ability of archaeologists to distinguish between storage and discard areas. Such a distinction is important for numerous models of social or political change that have been founded on the importance of storage. Recently, Kent (1999) has produced an interesting ethnoarchaeological study that focuses on the definition of trash areas as opposed to storage areas, reaching the conclusion that they can be distinguished using measures of diversity of artefactual occurrences. Unexpectedly, perhaps, she concludes from her work that the more diverse the assemblage (in terms of small counts but large number of categories) the more likely that it is to be indicative of storage.

Provisional refuse

This category covers debris that is either provisionally discarded to await final discard in another place or is being stored because it has a perceived re-use value (Hayden and Cannon (1983), and Deal (1985) refer to this as 'provisional discard'). On a related note, Gould has referred to there also being a "nostalgia effect" at work to explain the retention of defunct artefacts (1987: 149).

It is important to note that such material can include intact, worn and fragmentary artefacts and as such does not necessarily allow straightforward archaeological interpretations to be made that are based on the usefulness of recovered artefactual material. Furthermore, the continued usefulness of an artefact in a functional sense need not be the sole reason for its retention, as function does not necessarily correlate with social and symbolic 'value' (see **section 3.3**). Indeed, the existence of social practices and strategies for the retention of broken or worn objects and materials rather contradicts Western conceptions of storage and rubbish (e.g. Ingold's statement that rubbish is the 'obverse of storage' (1983: 555)).

On the basis of ethnoarchaeological and ethnographic observations it has been suggested that provisional refuse is often cached in out of the way areas within habitations or workspaces to reduce its potential hindrance value (Hayden and Cannon 1983; Schiffer 1987). As a result, it has been observed that there is possibly a spatial patterning discernible which will allow characterisation of material as 'provisional' discard (LaMotta and Schiffer 1999: 21). However, provisional discard poses problems for the archaeologist. For example, with regard to the recognising and distinguishing between this type of refuse behaviour and other types of behaviour associated with storage.

2.3.2 SITE ABANDONMENT PROCESSES

Until recently there has been greater attention paid to the elucidation of site maintenance procedures and the categorisations of primary, secondary and provisional refuse deposition than to the important role played by abandonment processes. In point of fact, as will be argued in **Chapter 3**, it remains the case that many mainstream archaeological studies of spatial distributions or of the use of space fail to go beyond habitation stage categories in their concern with the reconstruction of *in situ* activity during the occupation of a settlement. This is unfortunate in the light of the numerous studies into the impact of abandonment behaviour. Whereas many studies have focused on the more catastrophic scenarios of abandonment, including mass migration (invasion) and environmental crises, a number of others have illustrated more ordinary examples of settlement abandonment (Cameron 1993: 3). Studies of the latter kind are of particular concern here.

Ascher (1968) was one of the first to describe the intrasite abandonment of features as part of the normal process of settlement that he sought to pattern. Following Ascher, Schiffer was first to define specific abandonment processes (1983, 1985 and 1987). Schiffer saw abandonment processes as being responsible for the transformation of the archaeological record and separated abandonment processes from the normal use of activity areas. Abandonment was linked to the production of Schiffer's categories of *de facto* and *abandonment stage* refuse (see below; Cameron 1993: 3; La Motta and Schiffer 1999; Schiffer 1976, 1987).

De facto refuse

This represents an accretion process that is directly linked to abandonment. As defined by Schiffer, defacto refuse refers to material that "... consists of tools, facilities, structures, and other cultural materials that, although still useable (or reusable) are left behind when an activity area is abandoned" (Schiffer 1972: 160, 1976: 33, 1987: 89; LaMotta and Schiffer 1999: 21). In other words, de facto refuse covers material that, although it is abandoned at the use location, still has a perceived use value.

Abandonment stage refuse

This category covers *primary* or *secondary* refuse that might be left in areas previously kept clean in anticipation of abandonment (see Schiffer 1987: 98; Stevenson 1982; Verhoeven 1999: 38). However, as a refuse category it serves to overlook the complexity of those cultural formation processes that affect the treatment of artefacts at the abandonment of settlements.

In the present study it is argued that the consideration of site abandonment behaviour is of paramount importance, as abandonment processes operate constantly in settlements to influence the form and composition of all artefact assemblages (Cameron 1993: 5; Lightfoot 1993: 165; Tomka and Stevenson 1993: 191). To quote from the Foreword of an important volume entitled *Abandonment of Settlements and Regions*,

> All archaeological sites have been abandoned, but people abandoned sites in many different ways, and for different reasons. What they did when leaving a settlement, structure, or activity area had a direct effect on the kind and quality of the cultural remains entering the record… (Cameron and Tomka 1993)

As a consequence of such statements, the investigation of site abandonment processes is central to the aims and foci of this study. In relation to this, it is important to recognise additionally that at the time of abandonment selection processes are at play that can significantly alter the composition of the systemic assemblage and skew archaeological attempts to reconstruct past activities.

Recent studies have indicated that Schiffer's seminal work on site formation processes rather overlooked the range and variety of abandonment behaviour (see, e.g. Stevenson 1982, 1985; Cameron and Tomka 1993; see also Nelson (2000) on abandonment and social change). A number of studies have highlighted this variety and revealed the impact that abandonment and post abandonment behaviour can have on assemblage composition. They have also demonstrated the complexity and multi-scalar nature (structure, site or region) of abandonment behaviour. Such studies have further suggested that the separation of abandonment behaviour from everyday occupational behaviour is difficult and that to ignore the potential archaeological impact of behaviour, leading to, at the time of and after abandonment is a mistake. For example, in a cross-cultural study of mobile and sedentary societies Murray (1980) emphasised the effect of differential discard and abandonment behaviour on artefact distributions (see also Cameron 1993: 4). Furthermore, Murray noted that it is "difficult" to study discard without studying abandonment because there are situations where the two overlap:

> Sedentary populations may discard elements outside their own dwellings but inside neighbouring dwellings, which have been abandoned. In a situation such as this, how can we distinguish a discarded from an abandoned element? (Murray 1980: 498)

Through the study of abandonment it has been demonstrated by a number of studies that the degree of pre-abandonment planning and the rate at which abandonment occurred significantly influences the composition and integrity of artefactual assemblages. Some studies have rather narrowly focussed on conditions of rapid abandonment. In situations where there has been catastrophic abandonment (e.g. as at Pompeii), rapid abandonment might be expected to have occurred which, in turn, might have minimised the effect of cultural formation processes that are usually associated with abandonment and curate behaviour (see below; McKee 1999: 38). Other studies have highlighted the differences between sites that have been abandoned with the anticipation of return and those that have been abandoned with little probability of return. For example, Stevenson (1982) found in his study of gold rush mining camps in the Southwestern Yukon, that rapid abandonment produced evidence of manufacture or maintenance in progress, abundant *de facto* refuse, an abundance of items that would normally be curated, *de facto* refuse abandoned at activity loci, and little secondary refuse in living areas. Conversely, where - following abandonment - a return was anticipated, it was noted that caching and storage took place (see also Cameron 1993: 4). A similar situation is considered by Brooks (1989) but in terms of planned versus unplanned abandonment (see also Graham (1993) on the subject of "punctuated abandonment"). In another study, Lightfoot has demonstrated that in conditions of gradual abandonment produced a very different scenario to that of considered in Stevenson's studies (Lightfoot 1993: 166). Lightfoot concluded that a number of factors influence the composition of assemblages post-depositionally including the anticipation of return (after Stevenson 1982), access to the site, and the ritual attached to abandonment (1993: 166-168). In connection with the realisation that anticipation of return markedly effects the composition of assemblages, Tomka (1989) has distinguished differences between sites that are subject to episodic, seasonal, and permanent abandonment processes (see also Rothschild et al. 1993).

Finally, the importance of abandonment processes to archaeological interpretation can be perhaps best illustrated by examining the assumptions that underlie archaeological interpretations of artefactual distributions. Such an examination is reserved for later chapters, however here it should be noted that the various assumptions that affect the definition of material and contexts (e.g. *in situ* versus secondary refuse, or gradual versus rapid abandonment as a result of some catastrophe) must markedly affect archaeological reconstructions of the past.

Curate Behaviour

Of direct relevance to the preceding section is the study of curate behaviour as it impacts on the assemblages of abandoned sites. In addition, to his identification and classification of two categories of refuse associated with abandonment behaviour, Schiffer also recognised the effect of *curate behaviour* (*sensu* Binford 1977b: 34). Curate behaviour refers to the removal of useable material from abandoned activity areas and sites (Schiffer 1987: 89-91; Cameron 1993: 3). Again we are indebted to ethnoarchaeological studies of curate behaviour (e.g. Binford 1981b; Hayden 1976; Schiffer 1985, 1987). For example, Tomka (1993) has (also) produced an interesting study of transhumant agro-pastoral societies that focuses on the process of delayed curation whereby, in anticipation of return, the entire site furniture is cached prior to a seasonal abandonment (see also Schiffer (1987: 94) on delayed curation). However, on occasion, some residences remain abandoned for longer periods and sometimes they remain permanently abandoned. In the latter scenario material will be removed gradually in proportion to the length of the term of abandonment. In essence, delayed curation has been defined as the process that specifically operates between the time of a site's last occupation and its permanent abandonment (Tomka 1993: 21). Such activity naturally leads to the depletion of assemblages at abandoned activity areas on both continuously occupied sites and on completely abandoned sites. In the case of the latter, in particular, there are numerous ethnoarchaeological studies to indicate that curate behaviour can have a fundamental impact on assemblage composition and artefactual distributions. Graham (1993), for example, concluded that at

> ...permanently abandoned residential sites, not only is the bulk of the site furniture missing from the site, but the spatial arrangement of objects has more to do with the process of dismantling the site than with the use of activity areas. (1993: 39)

According to some scholars a distinction can be made between behaviour leading up to and at the time of abandonment and behaviour associated with a post-abandonment phase. However, such distinctions have been made largely in the context of ethnographic and not archaeological study. There have also been critiques of the concept of curation employed by Binford et al. (e.g. Nash 1996; Shott 1994). A principal criticism is that there is no way of knowing what artefacts or materials were curated on the abandonment of a given archaeological site; it would be a mistake to assume that our own values apply to the past (see Cordell et al. 1987). Nevertheless, predictions have been made on the grounds that certain artefacts are more likely to have been taken than others. With this in mind, in a recent article LaMotta and Schiffer provide one likely hypothetical scenario,

> A floor assemblage composed entirely of bulky, broken, and fairly ubiquitous objects is therefore likely to have been heavily depleted by curation processes, and would not provide a representative household inventory (Stevenson 1982). (1999: 22)

Implicit in this statement are the factors that they see as having an impact on curation or curate behaviour, such as the portability of the artefact, its ubiquity, its replacement cost and whether or not it is still functional. Furthermore, underlying the concept of curate behaviour, as it is used in many of the papers discussed above, is the principle of least effort (see also LaMotta and Schiffer 1999: 22). To elaborate, under the operation of this principle it is envisaged that inhabitants abandoning a site will transport as much of the assemblage as is economically viable to the new site. Three conditioning factors are generally identified namely: replacebility of the artefact, the transport costs involved and the conditions in which abandonment takes place (see Schiffer 1985; Stevenson 1982). All three will be mentioned later (see **Chapter 3** and **Chapter 4**), here it should be observed that in considering abandonment processes many studies appear to hold the first two steady and concentrate on the abandonment mode (e.g. Baker 1975; Bonnichsen 1973; Cameron 1989, 1990; Joyce and Johannessen 1993; Kent 1993; Lange and Rydberg 1972; Longacre and Ayres 1968; Robbins 1973; Schiffer 1972, 1976, 1985; Stevenson 1982). However, the universal assumption of human character and decision-making that is implicit in such approaches requires more consideration. For example, some scholars have argued that least effort models of abandonment are flawed where they are applied without any control for other 'ritual' factors that can operate at the time of abandonment (also known as 'ritual abandonment processes'; LaMotta and Schiffer 1999: 24; Szuter 1991: 219). It has been demonstrated that such ritual activity (often - but not always - linked to mortuary behaviour) can cause the deliberate deposition of material, the introduction of new material to a context, the removal of certain artefacts and materials and even the destruction of buildings (Cameron 1990, 1991; Kent 1984: 140; Lightfoot 1993; Montgomery 1993; Seymour and Schiffer 1987; Walker 1995). As a result it is the case that,

> ...ritual abandonment processes can mimic other forms of cultural deposition leading archaeologists to misinterpret them as whole or partial household inventories (Cameron 1991; Deal 1985). (LaMotta and Schiffer 1999: 24)

This potential ritual component will be developed further in the next chapter (see, e.g. **section 3.3**) in combination with discussion of the importance of artefactual deposition in general not only at the abandonment stage but also at the habitation stage of settlement.

2.3.3 POST-ABANDONMENT PROCESSES

Archaeological assemblages not only consist of objects that have undergone use, discard and abandonment as part of a living system; they have also experienced a range of post-abandonment processes, both cultural (discussed here) and natural (see below). A variety of accretion and depletion processes are subsumed within the body of post-abandonment activity and these have been demonstrated to have a significant impact on the composition and condition of artefactual assemblages.

Depletion processes that operate include scavenging, reuse, quarrying, collecting and pot hunting. Scavenging and reuse (other terms such as reincorporation and salvage might be applied) refers to the recycling of *de facto* (or other) material on the reoccupation of a settlement site. Reuse might cover the recycling of artefacts or the reuse of structures for the same or new activities. Scavenging (an intra-site process) refers to the "exploitation of previously deposited artefacts in a settlement by that settlement's inhabitants" (Schiffer 1987: 106-114; Kent 1993: 67). This leads to the depletion of inventories and conversely to the growth of systemic inventories on the re-incorporation of scavenged material. These are the most important processes governing intra-site abandonment and effecting abandoned assemblage composition. This is particularly true where abandoned structures and areas exist within still inhabited settlements where "occupied or abandoned sites are in close proximity" (Ascher 1968; Gorecki 1985; Horne 1983; Lange and Rydberg 1972: 422; Reid 1973; 114-5; Schiffer 1976: 34; 1987: 25-46, 106-110; Cameron 1993; 5). Such activities may occur accidentally through the inclusion of artefacts in quarried clay for new construction (after Verhoeven 1999: 40). This can represent a major earth moving activity on Tell sites that often disturbs and truncates earlier deposits.

Collecting and pothunting (an intra-site process) refers to the removal of material from one site to another site elsewhere. To quote Schiffer (1987: 114): "Collecting processes are those that involve the disturbance, removal, and transport of surface materials; pothunting refers to the disturbance, reclamation, and transport of subsurface materials". Schiffer makes the distinction between scavenging behaviour and collecting/pothunting because the latter affects the formation process of two (or more) sites. In addition, there are few transport constraints on the former. Looting activity - both ancient and recent - has been extensive at many Near Eastern sites. Commonly valuable or exotic and unusual items would be the target of collectors leading to their under representation in some contexts. Such activity also results in the disturbance and contamination of deposits.

Trampling can lead to the fixation of small objects into subsurface material. Also trampling by people and animals may cause the breakage or abrasion of objects. In addition, trampling can lead to false stratigraphical associations through the mixing of materials from separate levels. For example, refitting analysis of bone, flint and pottery has demonstrated the movement of material vertically (Villa 1982). However, for all three case studies such material is unavailable for study as a result of the absence of a systematic sieving regime being employed at any of the sites.

Accretion processes that will occur after the abandonment of a structure or feature include structural collapse, deliberate infilling or levelling (perhaps for new building) and rubbish dumping. For example, structural collapse can lead to the mingling of artefacts used in construction with the remnant systemic inventory. Deliberate infilling can include the reuse of abandoned structures or areas as rubbish dumps for secondary or even tertiary deposition (see Scarborough 1989: 415). This later activity can obviously cause confusion and difficulty with regard to the interpretation of the original function of spaces. Some scholars have suggested that dumping of rubbish in abandoned structures may not involve random action but rather involve the selection of specific artefact classes (Walker 1995, Walker et al 1996). This selection might have emotional or symbolic motivations that clearly have an historical perspective rarely afforded by the normative approach of archaeologists to artefact function. Further, the treatment of artefacts and structures at their abandonment, might also serve a purpose in the performance or expression of ties with the past but also in the reproduction of new ways of living.

Finally, deliberate infilling can operate in conjunction with efforts to terrace and/or level sites to create flatter surfaces for new building phases. From a functionalist perspective, such activity leads to the intrusion of later material into earlier contexts, the upward migration of earlier material and the depletion of archaeological contexts. In other words, such activity causes problems for spatial analyses as it raises a number of questions for the archaeologist concerning the definition of habitation phase deposits as opposed to those associated with post-abandonment activity. For example: how high above a floor or surface should an archaeologist include material as belonging to that surface or building phase? Can archaeologists safely rely on existing stratigraphic distinctions like that which is frequently made, for example, between the occupation deposits and the fills of structures? It is possible that the application of microstratigraphical techniques can grant archaeologists greater confidence in the recognition of primary occupation deposits, although much of the best work has focused on floors themselves and on the microscopic debitage from activities. Of more fundamental concern is the conception of such activities as having significance only in terms of the distortions that they create. It will be argued later (see, e.g. **sections 6.8** and **6.9**) that post-abandonment activities such as deliberate infilling and levelling have a social and/or symbolic as well as a practical significance.

2.4 NATURAL DISTURBANCE PROCESSES

In the above discussion there has been a concentration on cultural transformations that reflects the focus of the present study. However, it should be noted that there exists an extensive literature regarding the natural disturbance processes that operate on both inhabited and abandoned sites that has not been considered above (e.g. Schiffer 1976, 1987; Nash and Petraglia 1987; Wood and Johnson 1978).

Those processes that operate include chemical, physical (e.g. graviturbation), biological (e.g. faunalturbation and floralturbation), aeolian and hydrological processes (see for example Nash and Petraglia 1987; Rosen 1986; Schiffer 1987; Wood and Johnson 1978: 318-333). Erosion during habitation and in particular after abandonment (and the concomitant cessation of site maintenance activity) leads to the deterioration of all artefactual material. For example, mud-brick walls suffer deflation, causing artefacts to erode out of the walls. In addition, objects may also be transported by the wind or contexts may be buried under wind blown sediments.

Finally, although natural formation processes are not of chief concern here it should be noted that, through the application of various techniques used in the natural sciences, most site formation studies have demonstrated a greater ability to identify and isolate natural processes over cultural processes. In the main this is a reflection of the fact that natural formation processes are more predictable and constant. Arguably, with the advent of the post-processualist era, it is also the case that cultural transformations have become subsumed within the broader discussion of social and cultural practice.

2.5 ARCHAEOLOGICAL PROCESSES: EXCAVATION, RETRIEVAL STRATEGIES AND RECORDING

Having focussed above on cultural and to a lesser extent natural formation processes it is important to recognise, finally, that archaeological excavations, retrieval strategies and methods of recording directly impact on our understanding and interpretation of the archaeological record. Thus, it is the case that archaeological practice will vary from site to site depending on the nature of site, the conditions under which the team is excavating, the financing and resources available for excavation and also the educational background and specialisms of the individuals involved. Indeed, given the range of variables affecting excavation it is very difficult – if not impossible - to estimate its impact on archaeological reconstructions at the methodological and theoretical levels.

Realisation of the influence of archaeological practice on the record is seen in the works of a number of scholars from the late 1960's onwards (e.g. Clarke 1968: 15; Collins 1975; Schiffer 1976, 1987). However, their concern appears often to have been focused on method as distinct from theory. More recently, greater attention has been paid to consideration of the impact of theoretical frameworks and the biases influencing archaeologists in the recovery, analysis and interpretation of their data. Thus, to quote from Kent,

> Theoretical orientations condition how and what is seen, how it is interpreted, how interpretations are explained, and how understanding is achieved. (1987: 513)

For example, a number of scholars have highlighted the influence of gender bias on archaeological interpretation (Gero 1983; Conkey and Spector 1984). Others have also pointed to the influence of the selectivity of those bodies that support research (e.g. Wilk 1985; Patterson 1986).

Clearly, at an interpretive level, the recording and classification of data (e.g. typologies of structures or artefacts) for analysis has significant impact. Wylie (1985) has suggested that archaeological data are essentially mental constructs often connected to unconscious presuppositions (see also Hodder's reference to archaeological 'pre-understandings' (1999: 49-51)). Indeed, it has been observed that the very use of the notion of an 'archaeological record' involves the adoption of a theoretical model (Patrik 1985: 54). It follows that the use of alternative methods of recording, or attributes for classification can radically alter our conclusions. Such realisations have prompted a flurry of papers advocating a more self-critical and reflexive (or reflective) approach to archaeological practice. It is notable that many of the latter studies follow on from social theorists like Giddens (1993: 163-70) who similarly employed the notion of reflexivity in his conception of human action (see also Baert 1998: 87).

There will be further elaboration on the influence of archaeological theory and methodology in the next chapter for it touches on a key area of interest and concern to the study as a whole. Here, however, recognition of the impact of the archaeological process on data recovery, analysis and interpretation provides a lead into the following section concerning the biases in the foci of archaeological interest in site formation studies, as it is clear that such interest has often reflected the theoretical persuasion of their authors.

2.6 BIASES IN THE FOCI OF RESEARCH INTO SITE FORMATION PROCESSES

Previous sections have provided some review of the broad range of research into site formation processes. From this review certain characteristics and biases can be outlined that are worthy of further emphasis.

Of greatest note is the contribution made by ethnographic and ethnoarchaeological studies, many of which have taken place in the American Southwest. Such analyses have played their part in the theoretical and methodological developments associated with processual archaeology beginning in the 1960's. The majority of these studies have focused particularly on the analysis of households in sedentary societies, both during their habitation and - albeit less often - their abandonment phases

(LaMotta and Schiffer (1999) provide a useful synthesis of the range of formation processes that have to date been highlighted as significant in the life history of a structure). Why are houses (and households) the major unit of analysis? A simple answer lies in our own perception of social structure, wherein the household (and the family) constitutes the smallest social group. Such a view is demonstrated by Ashmore and Wilk's statement that '[h]ouseholds embody and underlie the organisation of a society at its most basic level' (1988: 1). Thus, according to Hirth (1989: 441),

> ...in pre-industrial societies, households are the foci of most production, storage and distribution tasks. They are also the primary units of consumption and reflect levels of resource control.

The definition of the household can be made through the identification of the remains of production, reproduction, consumption and redistribution activities (e.g. Bender 1967; Netting et al. 1984; Blanton 1994). Yet, although the concept of the house or household may be variously defined at an abstract level, with regard to the archaeological record, households have tended to be defined by related architectural features (e.g. walls, floors and internal fixtures, such as hearths) (e.g. Coupland and Banning 1996; Lowell 1991). Artefact types and their distributions have also been used to address the role of households within prehistoric societies (Ciolek-Torrello 1984, 1985, 1986; Deetz 1982; Flannery and Winter 1976). This concentration of study is of interest to the present investigation where it is later argued that the definition of contexts or *any* bounded space (whether an arbitrary archaeological trench or a structure) for analytical purposes influences both analysis and interpretation at a number of levels.

In the early stages of this (United States based) interest in the study of households in sedentary societies, assumptions were made concerning the qualitative and quantitative variability of floor assemblages as reflections of the differences in activities that were carried out in these structures (see LaMotta and Schiffer 1999: 19). However, with the advent of interest in, and study of, site formation processes (since the 1970's) there have been many reconstructions that have attempted to identify and control for the effects of site formation processes (e.g. Ciolek-Torrello 1984, 1985; Kent 1984, 1987; Reid and Whittlesey 1982; Savelle 1984; Scarborough 1989; Schiffer 1976, 1985, 1989; Seymour and Schiffer 1987; Stevenson 1985; Sullivan 1989; Szuter 1991). With a particular focus on aspects of site abandonment and post abandonment processes, house floor assemblages have been used to gauge the causes of, and constraints upon structure and abandonment (Baker 1975; Bonnichsen 1973; Cameron and Tomka 1993; Cameron 1990, 1991; Kent 1993; Lange and Rydberg 1972; Longacre and Ayres 1968; Robbins 1973; Stevenson 1982). However, it is the case that less progress in combining the study of households and their artefactual content with a fuller consideration of site formation processes has been made in the East Mediterranean and Near East regions. This situation is demonstrated by the relative lack of examples of work undertaken in the Old World.

Nevertheless, the spatial analysis of household, floor assemblages and stratigraphy (as in the case of micromorphological studies) also constitutes the largest body of archaeological research into cultural site formation processes within the present area of interest (e.g. East Mediterranean and Near

East). Numerous spatial analyses have been carried out but these have their focus often on structures and their content; few have demonstrated more than a passing consideration of site formation processes (e.g. Daviau 1993; Voigt 1983, Verhoeven 1999, 2000a, 2000b). Aside from rare spatial analyses that involve some consideration of site formation processes, the most fruitful avenues of such research involve the application of geomorphological and soil science techniques. In particular, a number of scholars, through micromorphological (or sedimentary) analyses of stratigraphic thin sections from a number of Tell sites, have focused on the identification of occupation surfaces, and the interpretation of formation processes and of the use of space (e.g. Boivin 1999; Courty et al. 1989, 1993; Davidson et al. 1992; Gé et al 1993; Matthews 1996, 2001). The success of such approaches has been partly reliant on the secure identification of architectural contexts but they have been successfully used to categorise types of floors and activities associated with various floored areas.

In addition to the few studies of floors and structures undertaken by micromorphologists on Tell sites, geoarchaeological approaches have been both advocated and undertaken. For example, in her book, entitled *Cities of Clay: The Geoarchaeology of Tells*, Rosen (1986) outlined methodological approaches for the geoarchaeological study of Tell formation, using Israeli case studies. In her study, she considers aspects of Tell structure, the identification of episodes of occupational hiatus, erosion (through studies of Tell slope and shape (e.g. Kirkby and Kirkby 1976; Davidson 1976)), mudbrick composition, sedimentary matrices (c.f. Butzer 1982), human activity areas, and ecological setting (Rosen 1986: 2). Rosen utilises and adapts Butzer's (1982: 87-90) categorisation of sediment types within the Tell matrix (1986: 12). The Tell sediments are the product of natural and cultural formation processes and their occurrence may be used as a measure of human occupation, site abandonment and of environment. In essence, Rosen's is a cultural ecology approach utilising scientific methodology (in particular geological) to identify and assist in the interpretation of the archaeological traces of past human behaviour on Tell sites.

The particular concern with households and the maintenance and abandonment activities that operate in the confines of a built environment is in contrast with the more limited attention that has been directed to the study of midden type deposits. This situation may be linked to the common conclusion that midden deposits comprise secondary or even tertiary deposits (see, e.g. Rothman's analysis of Tepe Gawra (2002) as discussed in **section 8.4**). Such deposits, when labelled in this fashion, are invariably considered of lesser importance on sites where the presence of deposits in rooms and floors take precedence given the greater possibility of their representing *in situ* primary deposits. However, outside the East Mediterranean and Near East region, there have been a number of studies directed towards the understanding of refuse contexts that are of interest to the present study because they raise points for comparison and analogy with artefactual deposition on multiperiod (Tell) sites. This is particularly the case for studies that demonstrate the potential that exists in the study of midden deposits and pit fills. Hill's (1993, 1995a, 1995b) study of pit deposits of Iron Age Wessex, Chapman's (2000b) study of pit fills from Balkan Neolithic settlements and Needham and Spence's (1997) study of midden accumulation at the Roman-British site of Runneymede are worthy of mention here (for another slant on middens see e.g. Rogers and Widdowson 1996). The first two have emphasised the importance of acts of structured-deposition that involve material that might be deemed rubbish from a modern perspective; subsequently, they will be referred to again in the following chapter. The latter study has had a profound influence on the theory and methodology that is employed in this study (see **section 3.4**).

In their study of refuse (midden) contexts from excavations at Runnymede Bridge, Berkshire, Needham and Spence (1997) investigated the artefactual content of a midden in terms of the number, weight and condition of various classes of artefacts (pot, bone, stone, flint and organic material). Furthermore, they formulated a specific definition of a midden (a term often variable and imprecise in its application), formed by 'deliberate and persistent acts' over a period of time (e.g. episodic dumping') (ibid.: 80). This was distinguished from a 'unitary dump' (to make up ground) or an 'incidental or natural form of accumulation' (see Needham and Spence - "undirected refuse aggregation" (ibid.: 81)). Identifying middens as clearly distinct features, Needham and Spence (ibid.: 84-85) suggest four broad categories of midden function (as perceived by human agents). The first category is that of the midden as a resource. This relates to Schiffer et al.'s concept of provisional refuse (see Schiffer 1987: 64-72). The second category is that of midden as the result of production and processing. In the case of this category it is often reasonable to assume that the midden is largely made up of the primary refuse from activity carried out in close proximity to the place of deposition. The third category is that of midden as the product of site management. In the context of dense built environments, like those that characterise many Tell sites, it is quite conceivable that the middens on such sites represent the latter category. The last category is that of midden as a symbolic structure and ties in well with Hill's (1995a) aforementioned study of structured pit depositions (see also **Chapter 3**).

Despite being centred on a site of different date, kind and geographical location to those studied here, Needham and Spence's (1997) categorisation of the factors leading to refuse rich contexts is useful and thought provoking. Indeed, it is probable that factors that they identify as influential in the formation of midden deposits at Runnymede are to a degree universally applicable and, therefore, useful to the understanding of artefact accumulation in some contexts on Tell sites (with the caveat that universal applicability should not be assumed). Needham and Spence divide the factors leading to refuse rich contexts into three 'fundamental stages' (ibid.: 81-82). The first stage is that of refuse *generation*. Numerous factors impact on the kind, quantity and quality of refuse generated. Needham and Spence list these as: population level; duration of occupation; basic techno-economic mode; level of food consumption; frequency of rebuilding; 'position' of site in production and exchange networks; retention of special objects; and fuel needs. The second stage is that of refuse *accumulation* and *remanence*. The third and last stage is that of refuse *survival* (ibid.: 84). This relates to later transformations (see above) that act to affect the differential preservation of material.

Clearly, although they are frequently overlooked in the literature and, arguably, neglected in the East Mediterranean and Near East region, middens present a potentially rich source of information on site maintenance procedures.

2.7 REVIEW

The preceding survey has demonstrated a portion of the wealth and variety of literature on site formation processes, the bulk of which has been written in the last three decades. The work of Schiffer et al. has established the variety and importance of site formation processes that operate on the record during habitation, at the time of abandonment and post-abandonment. In particular, such work has demonstrated the ability of such processes to significantly alter or even transform the composition and content of all archaeological assemblages and contexts. Of critical importance to this study is the acceptance and support for Schiffer's premise that site formation processes operate to influence the record spatially, formally, quantitatively and relationally. Indeed, such processes can also introduce patterning of their own (e.g. Binford 1978; Schiffer 1976; Sullivan 1978; Wilk and Schiffer 1979; Wood and Johnson 1978). It stands to reason therefore, that such natural and cultural transformations must significantly impact on archaeological interpretations and reconstructions of past human behaviour both at the intrasite and intersite scales. Yet, given the interest shown principally by American scholars working in the Southwestern states since the early 1970's, the study of site formation processes and the application of more holistic approaches to the interpretation of artefactual deposition in Old World archaeology has been relatively limited.

Although natural transformation processes are accepted as having a significant and - in some cases – overwhelming impact on the character of the archaeological record, this review has concentrated on the impact of cultural transformations. In the discussion of the various processes above, a threefold division has been made between site maintenance procedures, site abandonment procedures and post-abandonment activity. This conforms to divisions commonly made between habitation, abandonment and post-abandonment stages of site occupation. However, on any given multi-period Tell (or other) site there is by no means a clear chronological distinction to be made between cultural processes that operate at the time of a site's habitation, on its abandonment or during the post-abandonment phase of its history. Indeed, in a built environment it must be expected that structures in every given stage may occur synchronously, complicating the understanding of the site. Furthermore, despite the positive efforts of scholars such as Schiffer, other scholars have highlighted flaws in the theoretical and methodological assumptions made by him and others of the Behavioural school. For example, as a word of caution against rigorous classification of different refuse strategies, Sullivan suggested that the application of Schiffer's categories would tend to obscure the diversity of formation processes (1978: 201; Needham and Spence 1997: 77). It is also the case that an artefact or a context can undergo a very complicated and changing refuse history that may include more than one refuse category. The refuse history of an artefact from use to burial, is referred to as a 'waste-stream' by Schiffer (1976: 87) and known as a 'refuse-cycle' by Needham and Spence (1997: 72). Additional problems attendant on the process of categorising refuse deposition will be further explored in the following chapter (**Chapter 3**).

As has already been observed, in the past there has been a positivist tone to the study of site formation processes that implies that a proper understanding and reconstruction of the past can be achieved and that formation processes have 'predictive consequences'. This confidence in the predictability of site formation processes is seen in Schiffer's work. However, it is arguably the case that this confidence was unjustified – particularly with regard to the operation of cultural formation processes that are driven by factors beyond the narrow concerns of economic worth or functional use. In particular, there has been a growing realisation of the problem of equifinality that exists (contextually and artefactually) in terms of the outcome of the operation of formation processes on the record. Binford (1983) was the first to illustrate the naivety in Schiffer's belief that site formation processes could be individually isolated and their effect on the interpretation of the record discounted to allow reconstruction of a past cultural system. He criticised Schiffer's view of the archaeological record as a slice of history, considering instead that the record reveals more concerning the places where activities were repeatedly carried out than about individual episodes or actions (ibid.: 235-257; Smith 1992: 26-29). The impetus for such thinking is the realisation that it might prove impossible to distinguish individual processes by their signatures. In other words, there are a variety of processes at work on the record many of which do not necessarily leave evidence of their operation; one process might have a similar outcome to another or might obliterate all traces of another. In consequence, contrary to Schiffer's arguments, archaeologists have increasingly realised that many cultural processes are so complex and varied and the chances of equifinality are so great that the neutralisation of distorting influences cannot produce a complete interpretation of the archaeological record from a behavioural perspective (von Gernot 1985; Watson 1979, 1986: 430; Trigger 1989: 361).

The recognition of the operation of manifest formation processes, many of which might prove unidentifiable and hence cannot be made allowance for in archaeological reconstructions, is not a prescription for the futility of attempts to pattern intrasite human behaviour in terms of artefactual and contextual analysis. Instead, it will be argued that all archaeological reconstructions of past human behaviour require the consideration of site formation processes, the more in depth the analysis and the greater the range of techniques employed (e.g. soil micromorphology) the better. Beyond this, however, there is a perceived need to reconsider the focus of many past and still current spatial approaches to the analysis and interpretation of artefacts and contexts. A starting point for this reconsideration is the appreciation that although we cannot know the whole story as a result of the transformations that the record has undergone, we should entertain analyses and interpretations of artefacts (and artefactual distributions) beyond the search for *in situ* and primary deposits, or the spatial location of craft, domestic or storage activities. In so doing, however, archaeologists should beware of applying uncritically the straitjacket of terms such as primary or secondary that serves to reduce the true complexities and the richness of the archaeological record. This point will be taken up in the following chapter, where archaeological interpretations and analyses of artefacts and space are considered to establish the theoretical perspective adopted by the present study. A chief area for consideration is the every-day treatment of refuse and the abandonment of archaeological artefacts; be they objects, structures or settlements.

CHAPTER 3

THEORETICAL PERSPECTIVES ON THE USE AND ABANDONMENT OF ARTEFACTS AND SPACE

3.1 INTRODUCTION

In the preceding chapter, the historical development of archaeological interest in the study of site formation studies was briefly reviewed. In providing such a review, a demonstration of the variety and significance of site formation processes in general was intended. In addition, it was intended that the background and definitions to the terminology that will be applied later in analysis and discussion of the case studies be provided. In particular, there was a concentration on those categories of cultural transformations that are associated with site maintenance procedures and abandonment behaviour. This concentration reflects the focus shown by a number of recent ethnoarchaeological studies and forms the foundation for the following analyses and interpretations undertaken in later chapters.

This study has its theoretical and methodological foundation in such previous work as it attempts to investigate the impact of cultural site formation processes (that are in operation during the habitation and abandonment of a site) on archaeological reconstructions of the past using three case studies taken from the East Mediterranean and Near East region. Concentrating on those cultural processes that form and transform the record, it is apparent that interpretations that hypothesise direct links between the context of recovery and the context of use are naïve. Further to this, it has been argued in the preceding chapters that it would be unwise to make simple and categorical assumptions regarding any deposits in terms of primary *or* secondary discard, cultural *or* non-cultural formation processes and storage *or* manufacturing activity.

Having highlighted the importance and variety of site formation processes in Chapter 2, this chapter moves on to consider further the role of site formation processes in archaeological reconstructions of the use of artefacts, space and past human behaviour. As Clarke (1973: 13) observed, 'Archaeological entities, processes and explanations are bound by metaphysical concepts of time and space' and an appreciation of this is present in the discussion of archaeological approaches to spatial analysis. To begin, there follows a short consideration and critique of conventional approaches to the definition of settlement space and to the characterisation of the use of space. This includes a discussion of past (processual) reconstructions of activity areas that are made largely on the basis of finds distribution in relation to architectural entities and also of more recent structuralist and post-processual reconstructions of social space that are arguably also often made on the basis of similar criteria. In the course of the discussion, emphasis is also placed on the need for an interrogation of the *a priori* assumptions that guide archaeologists' own reconstructions of past human behaviour and societies. Following this critique, a reconsideration of the importance of refuse beyond functional considerations of refuse as rubbish (e.g. the unwanted residue of everyday activities) is undertaken.

Finally, there is a discussion of the problem of equifinality raised in **section 2.7** and the development of the notion of intentionality implicit in certain acts of cultural site formation processes (e.g. in the deliberate secondary dumping of material, the burial of a hoard or the abandonment of a building). In discussing these approaches the basis is laid for the following method chapter that sets out the programme for a contextual and artefactual analysis of material from the three sites of Tell Sabi Abyad (Chapter 5), Tell Jerablus Tahtani (Chapter 6) and Kissonerga-Mylouthkia (Chapter 7).

3.2.1 PROCESSUAL, STRUCTURALIST AND POST-PROCESSUAL APPROACHES TO THE INTERPRETATION OF THE USE OF SPACE

The present study is not directly concerned with the various methods that have been employed in the spatial analysis of settlement and activity areas. For insight into the variety and diversity of archaeological approaches to spatial analysis there are available a range of substantial and informative overviews (e.g. Blankholm 1991; Carr 1984; Clarke 1977; Hodder and Orton 1976; Hietala 1984a-b; Orton 1982; Voorips 1987; Wandsnider 1986). In addition, for Tell Sabi Abyad there is a recent spatial analysis of the Late Neolithic Burnt Village level 6 by Verhoeven (1999) that is mentioned further below and discussed at greater length in Chapter 5 (see, e.g. **sections 5.4.1** and **5.4.2**). Instead, this section will focus on the implicit archaeological assumptions and various theoretical premises that commonly underlie such approaches, particularly as they obtain to the interpretation of an artefact's context of use and deposition. Of key interest is the concern with, and definition of, *in situ* deposits that are heralded as the best source of information regarding past human behaviour and the use of space, by virtue of the tacit assumption that they are least altered by site formation processes. The issues surrounding the definition of *in situ* activity will be developed further through discussion of the role of site formation studies in spatial analyses and the assumptions on which archaeological reconstructions of past human behaviour and the use of space are based.

3.2.2 PROCESSUALIST APPROACHES

Clearly, there exists a large body of detailed spatial analyses and various analytical approaches have been applied, including sophisticated statistical analyses to map artefact densities (e.g. correspondence or factor analyses) (see, e.g. Carr 1984; Ciolek-Torrello 1984, 1985; Clarke 1972, 1977; Cowgill et al. 1984; Hill 1968, 1970; Hietala 1984a). However, few have adequately considered the impact of site formation studies in their reconstructions. Instead, they have frequently concentrated on mapping artefacts by function across sites; functional patterning has then been related to areas of certain activities (e.g. craft working).

A canvas of conventional archaeological approaches to the functional analysis of space in the East Mediterranean and Near East region, reveals that - generally - site formation processes have either been little considered or have not been considered at all in spatial analyses (e.g. Al-Khalesi 1977, 1978; Daviau 1993; Falconer 1995; Roaf 1989; Voigt 1983). Indeed, this situation exists - with some few exceptions (e.g. Verhoeven 1999) - despite a proliferation over the last three decades of studies detailing the impact of site formation processes (after Schiffer 1976). This proliferation has included attempts to militate against the effects of depositional and post depositional events by developing new approaches such as refitting analysis (e.g. Bradley and Fulford 1980: 861; Gifford 1978: 81; Hivernel and Hodder 1984; Rosen 1986: 93; Schiffer 1983: 679; Villa 1982). However, with the exception of a few studies of modern communities that were inspired by the processualist movement (e.g. Kramer 1979, Watson 1979), little such work has been attempted within the East Mediterranean and Near East regions.

The failure to consider the impact of site formation processes on the archaeological record is regrettable for it clearly undermines interpretations of past human behaviour. However, even in those few cases where cultural site formation processes have been mentioned they have been utilised uncritically, arbitrarily and often in a simplified and piecemeal fashion. Invariably the aim of many studies has been to identify *in situ* activity (e.g. food preparation or craft working) and to this end Schiffer's categories of primary or secondary refuse for example, have been used accordingly to rule in or rule out certain data either as being *in situ* or as dumped away from its place of use or generation. Furthermore, evaluations as to the affect of site formation processes on analyses and reconstructions have arguably been included to provide a justification (or excuse) for the interpretative shortcomings in the data. It is at the level of interpretation that there has been a failure to properly appreciate the complexity of cultural formation processes (i.e. a failure to move beyond categorisation as primary or secondary). There has also been too great an emphasis placed on the identification of subsistence or domestic activities and activity areas and too little consideration of the 'activities' associated with site maintenance and abandonment. Perhaps partly at fault is the uncritical adoption of theories and approaches particularly towards the identification and classification of activity areas that have forged in ethnoarchaeological studies of less sedentary communities or ethnographic and 'middle range' studies of living communities (e.g. Binford 1981b; Reid Ferring 1984; Kent 1984, 1990). Nevertheless, there do exist in the literature a substantial number of studies that involve the consideration of site maintenance and abandonment behaviour and have demonstrated their significant impact on archaeological attempts to reconstruct activity areas. Perhaps, therefore, the problem is of a more fundamental nature and has to do with basic archaeological assumptions and reasoning about both the systemic and archaeological contexts.

Where - as in the majority of cases - microdebitage or microstratigraphical information has been unavailable; the definition of activity areas on the basis of the identification of *in situ* deposits has involved an overwhelming reliance on the function of the artefacts, which is frequently reflected in their typological classifications. The perceived or real function of an artefact (the two are not necessarily one and the same) has been held paramount. From the identification of artefact function and distribution, activities have been mapped. In other words, artefact function and distribution has influenced both the interpretation of the function of the spaces and the spatial patterning of different activity areas.

However, whereas studies that have involved the mapping of find densities on sites that are often of a temporary or only semi-sedentary character have undoubtedly produced interesting and plausible interpretations, just as anthropological observations of living communities have, their affect on the archaeological investigation and interpretation of ancient multiperiod sites has yet to be great. In addition, where similar techniques have been applied to the built-environments of multiperiod sites they have arguably been used uncritically. This is not to say that standard interpretations of activity areas or of artefact function and distribution are entirely misguided. Rather there should be greater attention paid to the limitations imposed on such interpretations by archaeological assumptions regarding context and function and by the operation of site formation processes. In keeping with post-processualism's advocation of multivocality (e.g. Hodder 1991a, 1991c; Hodder et al. 1995) it is considered important that other perspectives, approaches and interpretations be adopted for comparison. These should move beyond the narrow concern with function (of artefact and/or space) and the identification of *in situ* activities other than site maintenance procedures or abandonment behaviour.

The interpretation of activity areas has, on occasion, been made solely on the basis of the distribution and density (clustering) of finds (e.g. Binford 1978, 1980), but in built environments, the presence and character of concrete structural remains have also had significant impact on the definition and interpretation of artefactual patterning. An uncritical use of artefactual material is observable in conventional processual spatial analytical approaches and more recent theoretical approaches to the study of the use of space discussed later (e.g. Allison 1995; Clarke 1977; Darvill and Thomas 1996; Fletcher 1989; Grøn et al. 1992; Hietala 1984b; Kent 1990; Larsson and Saunders 1997; Parker Pearson and Richards 1994a; Richards 1996; Samson 1990). This relative continuity of archaeological interest in the study of the use of space is not unsurprising; structures, fixtures and fittings constitute the most concrete and immovable components of an archaeological site. As a result, archaeologists feel more confident in their interpretation. In addition, this confidence has been boosted by research by semioticians, human geographers, ethnographers, architects, sociologists and environmental psychologists that has demonstrated that behaviour that reflects more general cultural values is embodied in the formation and use of the built environment. Such a realisation has stimulated a variety of studies within and outside the discipline of archaeology (e.g. Ardener 1981; Blanton 1994; Cunningham 1964; Fox 1993; Gregory and Urry 1985; Hillier and Hanson 1984; King 1980; Lawrence 1987; Lawrence and Low 1990; Moore 1996; Rappaport 1969, 1976, 1981; Sanders 1990). A particular product of this realisation has been the development and application of a range of models for the study of, for example, ancient and vernacular architecture and other built environments. The interactive model for human behaviour - environment studies has had one of the broadest followings with its stress on the interdependency of behaviour with environment and its allowance for change and adaptation, as well as culturally determined and innate behaviours (Sanders

1990: 44). The model rests on the premise that human behaviour influences the organisation of the built environment and that the built environment influences behaviour; each can be modified by the other (Altman 1975; Canter et al. 1975; Proshansky et al. 1976; Rappaport 1969, 1976, 1982; Lavin 1978; Maxwell 1983; Sanders 1990: 44).

3.2.3 STRUCTURALIST APPROACHES

The link between behaviour, culture, society and the built environment represented by the interactive model brings us to also discuss briefly studies that have focused on the role of space in social and symbolic terms. A number of studies (e.g. Donley-Reid 1990; Frankel 2000; Verhoeven 1999) have explored the social and symbolic meaning of built environments by borrowing from the work of social theorists of a structuralist persuasion. Principal amongst the latter are Bourdieu (1962, 1973, 1977) and Giddens (1979, 1981, 1993) both of whom have explored how symbolic systems were established and maintained through 'practice' (e.g. daily household and ritual activities; also known as *habitus* after Bourdieu 1977). They particularly focus on 'practice' as it engenders and maintains social distinctions and inequalities (see also Baert 1998).

For both Bourdieu and Giddens, space is also considered particularly important in setting up divisions in society (e.g. Bourdieu's idea of the house as a 'structuring structure' (1977: 90) or Giddens' description of it as a 'form of structuration' (Giddens 1979: 206-210)). This interest in the social and symbolic role played by daily activities and by the built environment understandably has appealed to archaeologists desirous of achieving a greater understanding of the social and symbolic mind-set of long dead people from static and partial material remains (see, e.g. Yates 1989). For example, Verhoeven (1999) provides an interesting and recent example of the welding of Schiffer's early work on site formation processes (e.g. primary, secondary, provisional, defacto and abandonment stage refuse) with an interpretative approach that is based on the social theorising of Bourdieu. However, in moving on to utilise the data in a structuralist interpretation of the use of space and nature of society, the impact of site formation processes is minimised to favour the interpretations of distributions that are predicated on common archaeological assumptions regarding artefact function and architecture (see also Verhoeven 2000a-b; see **Chapter 5**). Additional criticisms have also been raised against the use of such contemporary social constructions by present day sociologists to analyse past prehistoric societies (e.g. Šne 2000: 20-21). Without dwelling further on structuralist perspectives concerning the meaning and use of space it is important to emphasise the present contention that attempts to integrate such theoretical frameworks in recent post-processualist (or post-structuralist) studies can mirror some of the conceptual flaws of earlier interpretations that were built on functionalist frameworks. In particular, structuralist and other recent approaches employed in archaeological interpretation have demonstrated the same uncritical assumptions regarding artefact function and context of recovery in the interpretation of use and function of space. This situation is clearly ironic given the criticism that has been directed against processual approaches post-processualist writers.

It is also arguably the case that given the emphasis placed by Bourdieu or Giddens on structures (social, mental and architectural), those who too closely follow their theoretical lead demonstrate the same tendency not to adequately consider the importance of objects themselves. This is an important point as objects inevitably represent a significant component of material culture. Any underestimation of the importance and significance of objects can lead to flaws in analysis and interpretation. Within the theory of structuration it is argued that objects have values in the minds of people and have no independent existence; object meaning is dependent on the contextual and symbolic systems of meaning within society. However, as will be considered below, objects (or portable artefacts) have identities that can indeed be independent of space and context. Objects can derive their meaning through various activities and can actively participate in creating and maintaining social relations and knowledge (Donley-Reid 1990: 115; Chapman 2000a; see **section 3.3.**). With this in mind it follows that not only should the context of use be considered important in archaeological efforts to achieve insights into the meaning of things but so too should the artefacts themselves. Further discussion of the importance of artefacts and refuse follows in **section 3.3** below. First, however, additional discussion of recent archaeological approaches is required.

3.2.4 POST-PROCESSUALIST AND CONTEXTUAL APPROACHES

The concern with context and meaning shown by advocates of structuralist frameworks provides a lead into further discussion of post-processualism and in particular contextual archaeology. Post-processualism is best defined by one of its chief advocates as

> A group of views based on a critique of processual archaeology...Emphasis was often placed on the individual, agency, historical context and meaning. (Hodder 1999: 5)

Arguably, a number of the spatial analytical studies referred to above (and in Chapter 2) are in the vein of processualist thought with their concern for function over the symbolic and therefore they are subject to post-processualist criticisms. Certainly, Schiffer himself must be viewed as an arch proponent of processualist approaches to archaeological method and theory with his faith in the existence of general laws of site formation and the ability of archaeologists to predict their operation (e.g. Schiffer 1976, 1987). Terms such as 'individual, agency, historical context and meaning' do not appear in the key works on site formation processes; they do not figure in the theory of the Behavioral School. This contrast in theoretical position is of some interest, however, of greater interest here is the elucidation of the post-processual concern with context and meaning and the development of the contextual approach (see, e.g. Barrett 1987, 1994; Hodder 1987a-b, 1991a, 1999; Johnson 1993; Tilley 1991). A key to this approach was the belief that "material culture is meaningfully and historically constituted" and that meaning is to be found both in and between objects and their context (Hodder 1991a: 121). The identification of context impacts on the meaning of objects and the meaning of objects is gleaned by understanding the relations between objects in their contexts (Hodder 1999: 32-33, 194; Shanks and Hodder 1995: 15). According to Hodder, the context of an archaeological attribute is "the totality of the relevant environment, where relevant refers to a significant relation to the object necessary for discerning the object's meaning" (1991a: 143). The context varies and "is constructed with the specifically located object (e.g. object and/or feature location) and the dimensions of the variation being considered (either spatio-temporal, and/or depositional and/or typological) and with the questions being asked" (ibid.: 129-143). Essentially the identification of context and meaning is based on the spatio-temporal and typological associations, similarities and differences between objects (Hodder 1999: 48; Shanks and Hodder 1995: 14). Although the theoretical orientation prioritises agency, historical context and meaning (social and symbolic) the methodology, with its reliance on the identification of archaeological contexts and on typological classifications, is arguably akin to that of earlier processualist analyses.

In stating that the definition of objects depends on the interpretation of contexts and the interpretation of contexts depends on the definition of objects Hodder defines the starting point as a hermeneutic circle (see, e.g. Hodder 1991b: 1-11, 1991c: 33-34, 1999: 86; Hodder et al. 1995: 188; see also Johnsen and Olsen 1992). In his own words (Hodder 1999: 32-33) according to the hermeneutic circle 'the meaning of the part derives from its relationship to the whole, while the whole is understood from the relationship between the parts". Furthermore, this 'dialectic process occurs at many levels' from individual contexts to site to settlement systems and beyond (ibid.). The realisation of the interconnectedness of contexts and objects is significant and worth developing further with reference to earlier arguments. Critically, there is a difficulty presented by the recognition of the interdependence of context and object and the importance of their association to archaeological interpretations. This difficulty is founded in the acknowledgement that there is inevitably a theory laden-ness to archaeological data despite the best efforts of archaeologists to be objective whether in the course of excavation or during the formal classification of artefactual material (see, e.g. Hodder's discussion of archaeological "pre-judgments" (ibid.)). Put more simply the allocation by archaeologists in the field - or at the desk - of a name to a context (e.g. house, room, floor, pit and fill), for example, carries with it a level of interpretation that is a reflection of an already established theoretical framework. This can be multiplied by other observations in the field regarding the stratigraphic relationships or the character of the matrix. For example, the observation of heavily burnt deposits in a room naturally leads an interpretation that the room was heavily burnt, this interpretation can then inform the meanings attached to the interpretation of the artefacts. When the stress is on the context of use (or on *in situ* activity), then by extension there is a tendency to see those artefacts discovered in such a context as being situated in their context of use. In other words, the interpretation of a context invariably can take place at the very point of its discovery and this can directly impact not only on the final interpretation of that context but also on the interpretation of the artefacts found therein. This can then - in turn - have an impact on wider interpretations of human activity and society. Similarly, taking the artefact first, it is equally feasible that by assigning function to an artefact and (too literally) viewing the context of discovery as the context of use, archaeologists are uncritically influencing the interpretation of that context from the very moment of assigning function to that artefact. Given the theory laden-ness of archaeological approaches (and classifications), we must question with Thomas (2000: 9) whether the archaeological context of an artefact is indeed comparable with its cultural or historical context.

Naturally, the above sets out hypothetical outcomes to illustrate the problems inherent in the interdependency of context and object; however, it is not the intention to argue that Hodder (or others of a similar theoretical orientation) are so naïve as to be unaware of the inherent problems involved in the interpretation of the meaning of things (see, for example, the efforts of Hodder et al. to formulate a reflexive approach to archaeological practice (e.g. Hodder 1997, 2001)). Instead, the intention here is to stress the need for a critical examination of the archaeological assumptions concerning artefact function and use of space that can underlie processual, structuralist and post-processual spatial analyses. As will be detailed further below, such an examination may be afforded by approaching material culture and archaeological contexts at the macro level with a less optimistic faith in our ability to see *in situ* activity and the context of use. Instead, it would be useful to start from the acceptance that contexts and artefacts were abandoned and then investigate the ramifications of this premise. Such an investigation not only requires more critical consideration of the impact of archaeological assumptions; it also requires a greater consideration of site formation processes than often witnessed in spatial analyses of artefactual assemblages and interpretations of the use of space. More importantly, the previous chapter has demonstrated that site maintenance procedures and abandonment behaviours take numerous forms; their very variety and complexity also represents a potential source of information regarding the social practices and even beliefs of past human societies. In addition, such a focus adopts the position that the built environment can be both a passive container and reflection of social action *and* an 'active' arena wherein the symbolic expression of social actions and practices take place (see Tringham 2000: 343).

Furthermore, the identification of similarities and differences in site maintenance procedures and abandonment behaviour at the synchronic and diachronic levels provides an opportunity to look anew at the dynamics of social practice as it shifts and changes through time. The recognition of such potential should offset any pessimism felt in the failure of many archaeological studies to identify the 'myth' of *in situ* activity within the patterning of artefactual depositions in built environments. First, however, more must be said regarding the meaning of both artefacts and of refuse. As noted above, the concentration on the use of space and on the context of recovery has in many cases led to too little attention being paid to artefact meaning (and clearly there are problems also with definitively assigning function in the first place, see e.g. Adams and Adams 1991; Allison 1999). Such functionalist concerns are also present in many studies of site formation processes themselves and are to be witnessed in analyses that rest on interpretations of artefact utility, portability or economic worth. However, objects have a value outside of function and form and this value can transcend their utilitarian function. In turn the 'value' of an artefact impacts on its meaning in any given context of deposition. Furthermore, individual artefacts can experience cycles of use, deposition and re-use. In other words, artefacts can have complex biographies. With this in mind it is necessary to consider further the meaning (or multiple meanings) of artefacts and of refuse and to reconsider the information that might be gleaned from the analysis of artefactual deposition in formal, spatial, relational or quantitative terms.

3.3 THE IMPORTANCE AND SIGNIFICANCE OF ARTEFACTS, REFUSE AND FRAGMENTATION

In the preceding section there was a focus on archaeological approaches to the interpretation of the use of space. In particular, the archaeological concern with *in situ* activity was highlighted. In the process of this discussion, an emphasis was also placed on the importance and influence of portable artefacts on the analysis and interpretation of the use of space and past human activity. Here, there follows further discussion regarding the importance of artefacts at deposition.

Archaeological conclusions regarding the factors affecting deliberate and non deliberate discard acts during site maintenance together with those that affect the composition of assemblages at the time of (and immediately following) abandonment have frequently rested on similar assumptions regarding the formal and functional properties of artefacts as those considered above. Thus, we see numerous functionalist inspired analyses that produce explanations based on least effort principles, convenience, cost of replacement and on estimations of the transport costs involved (see, e.g. numerous references cited in **section 2.3.2**). Such explanations can also be related to other aspects such as procurement, production and consumption of artefacts and materials. However, there are further dimensions to artefacts and to refuse, than are contained within such functionalist approaches. With this in mind, discussion in the present section is particularly directed towards tackling the mistaken beliefs that not only does form equal function (this might be directed to structures also but here it is narrowly directed to artefacts) but that an artefact's function is constant throughout its life and also in the context of its deposition. This is not necessarily always the case, as will be argued below.

In addition, although - in the majority of instances – it is true that artefacts have been purposefully abandoned or discarded by the occupants of a site and that such material founds the basis for archaeological research, archaeology is not simply a science of rubbish (see Thomas' statement (1991: 56) that 'archaeology is concerned with the rubbish of past generations'). Such a notion is based on the 20th-Century view that rubbish is material whose use-life is over and which, therefore, must be spatially separated from living areas. However, there is a clear ethnocentrism underlying interpretations that are built on such modern Western notions. It stands to reason that Western attitudes towards refuse are likely to differ from those of past cultures. Indeed, by applying modern conceptions of rubbish to archaeological contexts it is probable that archaeologists effectively diminish both the importance of ancient rubbish and the significance of the means of disposal (Chapman 2000a: 4; see also Martin and Russell 2001). Thus, despite any suggestion to the contrary that might have been inferred from the previous chapter on site formation studies, it is important to realise that everything discarded on a site is not rubbish nor is its condition necessarily a product of heavy or prolonged use (e.g. Moore 1982: 75). Such a realisation can inspire efforts to redress the bias in archaeological reconstructions that search for primary activity and dismiss the importance of discarded secondary material. For example, drawing on case studies taken from the prehistory of the Balkans, Chapman (2000a, 2000b) has attacked naïve archaeological assumptions that view fragmentation as either accidental or post-depositional and seldom deliberate. On the contrary, Chapman argues that objects are reproduced rather than produced and that there is a personal involvement between people and objects both during and after an artefact's 'useful' life. Chapman's following statement is particularly pertinent to the present discussion,

> As regards deposition of objects, it may be proposed that 'rubbish' is no more dead than the newly deceased are dead but that, like the ancestors into whom the newly dead are transformed, objects that are deposited continue a hold a certain significance for the living. (Chapman 2000a: 5)

This view is in keeping with approaches propounded by scholars of the post-processual school mentioned in the previous section; it is at odds with more functionalist (or processualist) approaches to spatial analysis and human behaviour studies in archaeology. It is also at odds with many of the approaches to the study of site formation processes considered in the preceding chapter. The standard explanations used in such studies to account for the occurrence in contexts of objects broken prior to deposition is that they were broken accidentally or through use and then discarded because they were broken. Such simple explanations are implicit in many archaeological and ethnoarchaeological studies of the 1970's and 1980's (see Schiffer 1976, 1987; Binford 1981b; Deal 1985; Hayden and Cannon 1983 to name a few). In essence, such studies often näively equate archaeological refuse with modern rubbish. However, other explanations may be entertained that give both greater significance to the act of disposal and greater agency to the artefact that is being disposed of. Explanations of this sort have involved the ritual killing of objects, the breakage and dispersal of objects over an area for fertility reasons or the deliberate breaking and burial of artefacts in relations of enchainment (Chapman 2000a: 23; see also 1996). The latter term refers to the idea that by exchanging objects people are exchanging something of themselves and that there is a chain of personal relations attached to the exchange of objects. Objects are reproduced rather than just produced; 'exchange of inalienable objects means that an indissoluble link exists between all owners or users of an artefact and the artefact with its distinctive biography' (Chapman 2000a: 5).

A number of authors have dealt with the breakage and special deposition of ritual artefacts. For example, Meillassoux (1968) has argued that special purpose artefacts must preserve their special character by being removed from general economic transactions. Similarly, Garfinkel asks the question: "Are [ritual] items broken for burial or buried because they are broken?" and chooses the later with support from the Talmudic principle that states that once something becomes holy it can no longer be turned into an object of daily use (Garfinkel 1994: 178-9). However, Chapman (2000a) raises a number of problems with Garfinkel's theory. For example, the boundary between ritual and profane is too rigid when an artefact might have both ritual and profane identities in different contexts. Grinsell (1960) also discusses many cases where artefacts are 'killed' deliberately as a result of a range of reasons including fear of pollution, repugnance at reuse and a desire to avoid association with the property of the deceased (Grinsell 1960: 476-8; Grinsell 1973; see also Chapman 2000a: 25).

Other studies have also noted the deliberate breakage of figurines for incorporation in ritual contexts or dispersal over a settlement (e.g. Bausch 1994; Chapman 2000a: 25-26; Höckmann 1965; Makkay 1975, 1983; Masayoshi 1974). These studies are of interest in the light of the frequent occurrence of broken human and animal figurines at Tell Sabi Abyad (Akkermans 1996; Verhoeven 1999). Verhoeven briefly considers the deposition of headless human figurines in contexts at Tell Sabi Abyad in terms of their being the product of socio-economic transactions possibly related to services provided by individuals (1999). Such an interpretation is in keeping with the argument that they represent *in situ* activity (storage in this instance) that pertains to the daily socio-economic functioning of society. A contrary interpretation must also be considered in the light of interpretations of context not in terms of daily *in situ* use but in terms of deliberate abandonment procedures. This point will be returned to later (see **Chapter 5** for further consideration). Compelling evidence of the deliberate 'killing' of figurines, possibly in the course of a closure ceremony associated with settlement abandonment, has also come from Cypriot settlement contexts, most notably at the Chalcolithic settlement of Kissonerga-Mosphilia (Peltenburg 1991a, 1993b, 2001).

At the heart of the argument here is the realisation that artefacts can have complex social and symbolic values that extend beyond the narrow parameters of form and function. Growing appreciation of the complex meanings attached to artefacts has also manifested itself in the adoption of the metaphor of a life cycle in discussions of inorganic categories that integrate concerns with social time (Chapman 1997; Gosden 1994; Thomas 1996) with the active role of artefacts (Appadurai 1986; Kopytoff 2000 [1986]; Miller 1985, 1987). There has also been a growing interest in the link between technology (and technological knowledge) and social agency (e.g. Dobres 2000; Lemonier 1986, 1989, 1993; Rowlands and Warnier 1993). To achieve a greater understanding of the meaning of an artefact it is necessary to have some grasp of its history from procurement, production, and consumption to deposition. In other words, the study of artefact categories in a range of depositional contexts and at various stages of production and use is required. The importance of the need for archaeologists to attempt to reconstruct the specific history (or 'biography') and by extension the 'value' of the artefact (whether a fixed structure or a portable object) has been recognised by others (e.g. Brück 1999b; Kopytoff 2000: 379; Tringham 1995; Gosden and Marshall 2000). As Rawson states,

> All objects have an ancestry that is as important to an understanding of their roles as are their current use and function. If we do not know its ancestry, we cannot know the history of the thing. (1993: 79)

Emphasis on the 'history of the thing' is far removed from the functionalist principles that underlie much of the existing treatises on site formation processes; forged as many are in the ahistorical spirit of American New Archaeology.

Pred (1984, 1990) notes that there are a number of universally present components of history that include the life-histories of made objects, the reproduction of social and cultural forms and the formation of the biographies of the actors. However these components are not 'universal' in a processual or New Archaeology sense as Tringham observes,

> These are not subject to universal laws and general principles but are interwoven differently with each local historical circumstance in the formation and transformation of actually historically contingent places (Pred 1984: 284, 291). (2000: 344)

Chapman distinguishes three general attributes that can lead to the attribution of value to objects. These are presencing, grounding and categorisation. The first of these is tied to the notion that objects can give presence to the Other (the past) and demonstrates the value that is enshrined in material culture (see Chapman 2000a: 30). The second, namely grounding, refers to the formation of links (achieved through social action) between particular artefact classes and specific contexts of social practices

> ...grounding is reflexive – the artefacts grounded in a place take on the symbolic attributes of the place as much as the place is enhanced by the association of the artefacts. (Chapman ibid.: 31).

The parallels with interactive models concerning built environment and human behaviour and with Hodder's own notions regarding the interdependency between the meaning of contexts and the meaning of objects are apparent; though Hodder specifically concerns himself not only with the living context of use but also with the archaeological context (see **section 3.2.4**).

Chapman's category of 'categorisation' is rooted in the idea that artefacts embody the principles of human categorisation processes (Miller 1985). Categorisation concerns the order imposed on the world by the creation of cultural order; subsequently, artefacts can be characterised as

> ...simultaneously a form of natural materials whose nature we experience through the practice and the form through which we continually experience the particular nature of our cultural order. (Miller 1987: 105)

As noted in the preceding section, just as structures can produce and reproduce social order (e.g. after Bourdieu (1977) and Giddens (1981)) so too can portable artefacts. Just as people transform space into place (place being space objectified (Richardson 1989)), so the objects found in those places contribute value to the places (Chapman 2000a: 190). As Chapman writes,

> ...the world of objects creates the social world as much as the converse. This mutual constitution creates interdependence between people and things such that the social value of the producer can never be entirely absent from an item in its local biographical voyage. (ibid.: 37)

Similarly, Weiner (1985) argues that the life cycle of humans and the life-trajectory of things play a key organisational role in the reproduction of human communities, through the embodiment of the social in the body and the objectification of the social in things. Strathern provides a useful definition of 'objectification', as the manner in which persons and things are construed as having value and meaning in themselves (1988: 175-6; see also Chapman 2000a: 185). It therefore follows, that social practices that involve the fragmentation of things can have significant social meaning equal, for example, to more commonly acknowledged measures of social divisions (e.g. the storage and accumulation of quantities of goods) (Chapman 2000a: 43).

This returns us to the problems of oversimplification in the way archaeologists separate primary from secondary (or provisional) deposits in their efforts to focus on *in situ* activity, efforts that ignore the variety of behaviour associated with refuse generation, remanence on the site, deposition and survival in the record. Not only should archaeologists be wary of the operation of depletion processes associated with site maintenance procedures and abandonment behaviour (e.g. curate behaviour), they should also be wary of the operation of accretion processes both in terms of storage of refuse and of rites associated with the deposition and fragmentation of things. Nevertheless, as with the patterning of activity areas for example, the significance of the fragmentation of objects is rooted also in the identification and interpretation of contexts (see the previous section). In certain contexts this would seem relatively straightforward, for example fragmentation must appear to have been deliberate in those clear contexts of deliberate structured deposition (a term first coined by Richards and Thomas (1984)), such as hoards or graves for example (see, e.g. Chapman 2000a: 49; see also the funerary assemblages from Jerablus Tahtani, see **section 6.6.6**). However, in other contexts the definition of the deliberate fragmentation and deposition is more problematic. For example, Chapman raises the problems that are attendant on the interpretation of assemblages found in both accidentally and deliberately burnt houses for in such circumstances all might have been lost to the fire, some might have been removed or new artefacts added as part of a ceremony (2000a: 105-6) (a point that is clearly applicable for of a number of structures from Tell Sabi Abyad (see **section 5.7**) and for Building 200 at Kissonerga-Mylouthkia (see **section 7.6.2**).

Finally, then, it is apparent that refuse that includes worn and broken artefacts must not be seen as a homogenous category (Moore 1982, 1986). On the contrary, it is invariably heterogeneous in character on many different levels over and above typological classifications and material. As is the case with whole artefacts, refuse was (and is) structured according to complex and manifold cultural classifications and not simply according to what we consider to be the most important artefact attributes; attributes that are often judged in clear functionalist terms (see Bulmer 1976; Hill 1995a: 4). It has been argued that both the fragmentation of artefacts and their subsequent deposition can frequently be a deliberate act associated with a range of symbolic behaviours. This is not to suggest that all fragmentary artefacts and all refuse contexts are meaningful in the same way. Certainly, more straightforward refuse disposal of obstructive, hazardous material away from working and living areas might be expected to have occurred. Indeed, it is important not to discount the practicalities of daily living as many post-processualist studies would appear to, for example in their conception of the habitus with its frequent emphasis on cosmological systems over and above practical considerations in the government of human action (e.g. Parker Pearson and Richards 1994b: Hill 1995a; 1995b). Such a concentration on symbolism has prompted Brück (1999a) to criticise the attendant reduction of human action to irrational motives and concomitant the marginalisation of the practical.

Nevertheless, it would be a mistake to uncritically apply Western standards or notions of rubbish to the study of archaeological contexts in general, and particularly to the study of refuse pits or midden deposits (see Hill 1995a; Chapman 2000a, 2000b). Numerous studies have shown refuse is linked to culturally specific and highly charged notions of dirt and pollution (Douglas 1966; Hodder 1982a: 155ff; Moore 1982: 76; Panoff 1970). In particular, the definition and deposition of refuse is embedded in a range of other relationships through which a society is daily constituted (e.g. Bulmer 1976; Chapman 2000a, 2000b; Clarke 1997; Moore 1986; Hodder 1982a, 1987c; Hill 1995a: 4). This realisation necessitates a reconsideration of certain conclusions that were reached at the close of the preceding chapter regarding the study of site formation processes and in particular the problems associated with equifinality.

3.4 INTENTIONALITY AND THE PROBLEM OF EQUIFINALITY

Following on from the section above, the issue of equifinality that was raised in the previous chapter can be reintroduced for discussion (see **section 2.7**). It has already been argued that the preserved archaeological assemblage of any one context or site is but a portion of the systemic inventory by virtue of the actions of a host of depositional and post depositional transformations. To identify the nature of each transformation process or the degree of its effect on the record is beyond the present approach. Indeed, despite the optimism of Schiffer (1972, 1976, 1987), and the invaluable insights afforded by the ongoing work of geomorphologists, geoarchaeologists and soil micromorphologists (e.g. Goldberg 1980; Gé et al. 1993; Kirkby and Kirby 1976; Matthews 1996; Rosen 1986) there are many that would continue to argue that the problem of equifinality remains in our interpretation of natural and cultural site formation processes. Nevertheless, while it may rarely be possible to separate the signatures left by the manifest processes that operate on the record this should not be used as reason to ignore site formation processes or to gloss over them by arbitrarily characterising deposits as primary, secondary or provisional refuse. Such categories, as has been argued above, can be restrictive; they also emphasise the primacy of the habitation phase over abandonment or post abandonment phases. This emphasis is challenged here on the grounds that definitions of primary or secondary for example are seldom adequately tested. In addition, the challenge may be levelled at the fundamental archaeological assumptions regarding contexts and artefacts that underlie such definitions and that are all too often not examined.

The problem of equifinality must remain, however - without belittling its import - of greater interest to the present study is the elucidation of past social practices associated with site maintenance procedures themselves and more particularly to site abandonment activity. By focusing on the notion of refuse, and by considering artefacts to be, for example, deliberately deposited whether in the course of every-day cleaning, during the abandonment of structures or as structured deposition, new approaches to investigating behaviour may be entertained. In particular, it might still be possible to pattern extraordinary acts of artefactual deposition amongst the ordinary and to posit interpretations that are based on the identification of intentional versus inadvertent acts of deposition.

As has been argued above there is a degree of conscious (and even sub-conscious) intention underlying the deliberate fragmentation of things and in the choice of context for deposition of objects, whether they are intentionally or unintentionally broken prior to deposition. The motivation behind such intention could comply with (often processualist) notions founded on Least effort principles, replacebility or transport costs referred to at the close of the preceding chapter. Equally, in recognition of the active role played by artefacts in the production and reproduction of social values and practices, the motivation behind their deposition might be linked to systems of value (and categorisation processes) that are beyond simple artefact form, function or economic worth.

The elucidation of intention requires the study of formation processes influencing the character and condition of both the artefact and its context of discovery. Of particular interest to both the present discussion and to later analyses, is Needham and Spence's statement of the distinction between intentional and incidental aspects of refuse accumulation. They consider that in their own studies (their emphasis)

> ...*intentionality* emerges as crucial, the distinction between contexts offering direct evidence of specific, intended acts (whatever the *kind* of intention) and those modified or totally diffused by *incidental* factors, natural or cultural. This is where the rigorous study of formation processes plays a vital part. (1997: 87)

This constitutes the founding premise of Needham and Spence's study of the archaeological manifestations created by the interaction between intentional *versus* inadvertent discard activity. It is also a conceptual 'corner stone' of the present study.

3.5 REVIEW

As a precursor to the following chapter on method, it is useful that some of the strands of the preceding sections together with the preceding chapter on site formation processes (and terminology) be drawn together to focus on the objectives of the present study.

From a brief discussion of past spatial analytical and theoretical approaches to the use of space it has been argued that there has been little adequate consideration given to the impact and significance of site formation processes on the composition and content of the archaeological record. In addition, it has been argued the assumption that the location of recovery (particularly where certain classes are abundant or artefacts are intact) can relate to the primary locus of activity remains pervasive in archaeological efforts to reconstruct past human behaviour. This study is sceptical of others' identifications of *in situ* activity and maintains that all too often classifications of *in situ* activity (e.g. distinctions between primary and secondary) are assumed rather than critically examined. Furthermore, too often there has been a crude evaluation of artefact value and significance in terms of its form, material of manufacture and function. In turn the functional elements of an artefact have been given prime significance in relation to the use and function of the space in which they are located. This naming of the function of an artefact can lead on to interpretations of the function of space; subsequently, there is the need to be careful to avoid falling into a trap of circular arguments.

This study is concerned with the detection and elucidation of the intentional aspects of site maintenance procedures and abandonment behaviours. The terminology employed is borrowed – in part - from Schiffer and from ethnoarchaeological literature concerning site formation processes. As observed, such studies have demonstrated the manifest variety of site formation processes and the importance of such processes to our understanding of the archaeological record. This study, however, argues that models for human behaviour founded on least effort principles, replacebility costs of artefacts, or transport costs can be restrictive. Site maintenance procedures did not necessarily conform tightly to hygiene concerns, the practical use of artefacts or obstructiveness of material, as many modern ethnographers or archaeologists perceive them. Similarly, abandonment was not necessarily forced or rapid, nor were the motivations behind accretion and depletion processes associated with abandonment centred on the cost of replacement, ease of transport or on speed. Hence the introduction of the writings of other authors regarding the importance of intentional action (e.g. Needham and Spence 1997), aspects of ritual (Hill 1995a) and of the deliberate fragmentation of artefacts at deposition (Chapman 2000a). These have been placed in the wider context of a range of theoretical and methodological approaches, including spatial analyses (e.g. Hietala 1984b), the study of the use and meaning of space (e.g. Bourdieu 1962, 1977; Giddens 1981; Kent 1990), contextual analysis and post-processualism (e.g. Barrett 1987; Hodder 1987a-b, 1991a-c, 1999). In drawing on a wider body of theory it has been argued that artefacts (and also 'refuse' in all its various guises) can both produce and reproduce social meaning beyond and outside of their 'mechanical' function or economic potential. This is apparent in their treatment in life and in 'death'. As a consequence, in the present study the interpretation of archaeological manifestations of the intentional over inadvertent deposition of artefacts not only includes more straightforward functional arguments (e.g. obstructive qualities, usefulness in original function, portability or replacebility) but also entertains more abstract 'ritual' interpretations.

Clearly, there is a need to consider artefacts and contexts from different perspectives and not simply to consider them to be varying categories of rubbish and reflections of straightforward function. The separation of what might be deemed an intentionally deposited artefact from an inadvertently deposited artefact is an interesting notion that is explored further in the site analyses presented in later chapters. A focus on intentionality also gives pride of place to the decision-making of the human agent. Intentionality in the treatment of artefacts at the point of their discard and abandonment (and after) is not motivated by simple practical and economic concerns or least effort principles but also by socio-political and ideological precepts. Arguably, few studies consider the latter in their reconstructions of past human behaviour that are invariably based on the synchronic spatial analysis of artefact distributions at the intra-site or inter-site level. Indeed, many such studies comprise two-dimensional reconstructions that assume synchronicity between contexts and artefacts that are the product of multiple depositional events. As a consequence, they bear little real relation to the everyday activities and experience of past human inhabitants.

It is clear that no one theory of site formation and abandonment behaviour and no single methodological approach will necessarily be equally applicable to every given site. Instead, it is necessary to take into account a range of site-specific artefactual and contextual detail in interpretation. The methodological process adopted in the present study will be detailed further in the following chapter, here however it should be noted that this method is inevitably rooted in previous work involving artefactual analysis. Thus, the variables for analysis include broad functional categories (that are groups of artefact types commonly associated with particular activities or functions), artefact condition, material of manufacture and size.

Analysis of the three sites will be conducted at both the diachronic and the synchronic level. As previously noted, in many spatial analyses the consideration of the latter is predicated on the spatial reconstruction of activities that pertain to coterminous functions (e.g. administrative, processing or a variety of other domestic or craft activities). However, it has been argued by certain scholars that any focus on rooms and room fills for example requires a consideration to be made of possibly all three stages of deposition from habitation, through abandonment to post abandonment activity. In consequence, it would be a mistake to accept that broad context categories such as room, floor or room fill are truly representative of coterminous activity. In other words there is an element of the diachronic in the contextual reconstruction of individual occupation of building phases that is not necessarily adequately captured in archaeological classification and recording methods.

Here, the focus at the broadly synchronous level of activity is directed to the analysis and interpretation of the evidence for, and meaning(s) of artefactual assemblages in terms of a range of different discard and abandonment processes operating in the same phase within built environments. Clearly, in the patterning of broadly synchronous activity at the intra-site level, a holistic approach is required for the study of site formation processes that must involve not only the consideration of buildings, room fills and floor assemblages but also the consideration of other contexts of deposition across the site. As Needham and Spence state that there is

> ...a need to consider all refuse components (including the remains of buildings and other structures) as inter-dependent aspects of a unified site system, seeking and characterising diversity within the gross deposits and wherever possible identifying different types as unitary events or as longer-running processes. (1997: 86)

Investigation at the diachronic level considers - where possible - the nature of site maintenance procedures and of site abandonment as they shift and change through a settlement's life. For Sabi Abyad and Jerablus Tahtani there is an opportunity (albeit limited by the area extent of the excavation exposures) to pattern artefactual deposition in a temporal dimension. However, for

Kissonerga-Mylouthkia the lack of horizontal stratigraphy across the site presents problems; indeed, temporal patterning is only possible within select features (see **Chapter 7,** Building 200 and Pits 1 and 16). Nevertheless, where it is possible to pattern change in artefactual deposition interpretations will focus on the consideration of intentional versus inadvertent site maintenance and abandonment activities (see above). Underlying this interest in the diachronic perspective is the belief that the intentional operation of different site maintenance procedures and of various abandonment activities has the imprint of particular social practices and even of social groups. In other words, there is an established way of doing things - if (for the present) we disregard the out of the ordinary - that are actively involved in engendering and maintaining notions of status, of hygiene, of site function, of death and other cultural concepts (see, e.g. wider discussion relating to issues of sedentism, urbanism or state formation in **section 8.3**). In turn, phases of abandonment that are followed by the re-use or reoccupation of a site involving changes in site-maintenance activity, for example, afford an opportunity to consider the connections between such resettlement and changes in social, socio-political or religious order. Thus, through the contextual analysis of artefactual deposition at the three case studies, this work aims to assess whether indeed it is possible to achieve an improved understanding of social and settlement structure(s).

To achieve this, there follows a programme of contextual and artefactual analysis of material from three sites of very different character, environment and period. The analytical methodology will be detailed in the following chapter.

CHAPTER 4

A METHOD FOR THE CONTEXTUAL ANALYSIS OF ARTEFACTUAL DEPOSITION

4.1 INTRODUCTION

In the last two chapters, the history of research into site formation processes was briefly reviewed (**Chapter 2**) and particular consideration was given to their place in archaeological reconstructions of the use of artefacts, space and past human behaviour (**Chapter 3**). In the former, those cultural transformations associated with site maintenance procedures and abandonment behaviour were chiefly discussed and the terminology used later in the analysis and discussion of the case studies was established. In the latter, criticism was directed to conventional approaches to the definition of the built environment and the use of space that neglected site formation processes in their reconstructions. An emphasis was placed on the need to interrogate the archaeological assumptions that guide many (processual, structuralist and post-processual) reconstructions of past human behaviour and societies. In addition, a reconsideration of the importance of archaeological refuse beyond Western notions of rubbish (e.g. the unwanted residue of everyday activities) cited a number of recent works that illustrate the potential multiplicity of meanings conveyed in the treatment of artefacts. **Chapter 3** concluded with a discussion of the problem of equifinality and the development of the notion of intentionality implicit in certain acts of cultural site formation processes.

In this chapter, there follows an account of the method to be employed in the contextual and artefactual analysis of material from the three sites of Tell Sabi Abyad (Chapter 5), Tell Jerablus Tahtani (Chapter 6) and Kissonerga-Mylouthkia. This method has been forged in the knowledge of a range of studies relating to site formation processes (see **Chapter 2**) and tempered by the theoretical developments of the last two decades, particularly those associated with post-processualism (see **Chapter 3**). As noted in the introductory chapter, the neglect of site formation processes in the archaeological literature of the East Mediterranean and Near East region has provided impetus for the present focus on case studies from this area. The particular problems that the selected sites pose for the present analysis and interpretation are designed to be used to positive effect as a future stimulus for more refined understandings of the region's prehistory. In other words, while these sites are not presented as 'typical' of particular periods or cultures, they can be seen as representative of certain (archaeological) situations. Thus, Tell Sabi Abyad comprises a prehistoric open plan farming settlement with multiple occupation levels; it is certainly the case that many sites of comparable form exist in the region. More significantly, the site has yielded a substantial burnt village horizon that in terms of the exceptional quantity and preservation of artefactual remains can be considered comparable to other sites with similar evidence of a catastrophic conclusion. The richness of this burnt settlement at Tell Sabi Abyad has fuelled interpretations that rest on the assumption that the end was sudden (see, e.g. Verhoeven 1999, 2000a, 2000b), so sudden that the inhabitants were obliged to leave substantial in situ remains. However, in Chapter 5, these assumptions and interpretations are refuted through an (re)analysis of artefactual deposition that serves as a warning for those who would liken similar circumstances to a Pompeii scenario. Jerablus Tahtani, in turn, presents a very different site for analysis. Unlike, Tell Sabi Abyad it is circumscribed by a fortification wall (during the Early Bronze Age IV), that serves as a container for a denser built-environment. Within this settlement, multiple occupations can be identified, in many cases with structures being built directly one upon the other. Evidence of deliberate infilling prior to rebuilding and of continuity in settlement plans between levels combine with the evidence of the fortification walls and drainage systems to suggest a degree of community wide planning control. This is in contrast with Tell Sabi Abyad, however the character of the settlement at Jerablus Tahtani is comparable to many other sites, particularly of those belonging to the late prehistoric and early historic periods in the region. Indeed, from the character of the site, its date and its location it is quite probable that occupations at Jerablus Tahtani were affected by larger socio-political entities. Kissonerga-Mylouthkia is more intangible than the others, it is not a Tell site nor has it produced comparable architectural remains. Further, the site lacks horizontal stratigraphy and the majority of features comprise pits and hollows. Nevertheless, the character of deposition in these features and the intangible nature of the structural remains not only create problems for archaeological interpretations but also afford comparison with sites of a similar eroded and ephemeral nature.

To begin with, a brief survey (and in some cases a recap) is provided of those few studies that are considered particularly relevant to the following analyses but which because of their methodological rather than theoretical nature were mentioned only in passing in preceding chapters. This is then followed by a detailed step-by-step account of the methodology to be employed and the attributes to be analysed.

4.2 Past methodologies for contextual and artefactual analysis.

There have been a number of artefact studies that are of methodological interest to the author, and of varying degrees of relevance to the present study; principal among these are those studies that have specifically focussed on aspects of artefactual assemblage composition and condition relating to site maintenance and abandonment procedures (e.g. Needham and Spence 1997; Stevenson 1985; Tomka 1993; Webb, 1995, 1998). There is a large body of literature that falls into this category, far larger than could reasonably be mentioned here, however it is useful to mention a few.

As noted in the preceding chapters, the majority of archaeological and ethnoarchaeological studies have concentrated on the formal typological or functional aspects of assemblage composition (e.g. Binford 1978, 1980; Schiffer 1976, 1987; Creighton and Segui 1998 to name but a few). As has already been observed these have often made a too literal translation of object function and distributions into the function and organisation of settlement space. In so doing, they have side stepped issues that complicate the ready consideration of artefact function such as those obtaining to the social or symbolic 'value' of the artefact, its varied life history and whether or not it was still of use at the point of deposition. Aware of the constraints that typology can impose on the interpretation of artefact function at the point of deposition and, in turn, on the context of that deposition, studies that have utilised both typology (and/or function) as well other approaches to the classification of artefacts are of interest here. For example, a number of studies have focussed on other formal properties of artefacts such as the condition of artefacts and aspects of their manufacture and material (e.g. Tomka 1993; Webb 1995, 1998). These studies have served to illustrate not only the physical properties that impact on the preservation of materials (and on artefact classes); they have also demonstrated the importance of curation (or manufacture) and of curate behaviour as they relate to the value of an artefact once worn or broken.

Such studies, that combine function, condition and curation in the discussion and analysis of material, provide the closest parallels to the present methodology. For example, Webb's (1998) study of the curation and expediency of ground stone recovered from Bronze Age Marki Alonia, Cyprus, suggests that there was differential treatment of artefacts that appears to reflect the investment of time and energy in their procurement and manufacture (see also the work of Binford (1979, 1980)). Tomka's (1993) work on aspects of abandonment, involving the quantification variables of condition and of manufacturing type is also of considerable interest to the present study, particularly with his consideration of the effect of delayed curation on the structure and content of assemblages. Through his work, Tomka identifies condition and manufacture type of artefacts (ibid.: 15) to be influential on the way artefacts are treated at the time of their abandonment and suggests that the percentage of expedient types in an assemblage should rise while the percentage of curated craft types should fall over time. Eventually, this situation creates an overrepresentation of the former and an under representation of the latter within permanently abandoned settlements. Other studies that are also of methodological interest here are those involving the analysis of material from non-household contexts (e.g. Hill 1995a; Needham and Spence 1997). A number of these studies are also of theoretical interest to the present study (see **section3.3**).

4.3.1 Method

This study combines two interrelated and interdependent areas of investigation, namely: artefactual and contextual analysis. The detail of both, as regards the classification of the specific variables for analysis, follows below. Within the later intra-site analyses priority is given to utilising a range of artefactual and contextual information in an effort to seek patterned relationships in the record, patterned change through time and the interpretations for such patterns. In the case of the artefactual material, the range of data has been restricted to certain categories of finds. It should be recognised that many sites yield considerable quantities of artefactual material (particularly extensively excavated Tell sites like Tell Sabi Abyad). This in conjunction with aspects relating to retrieval strategies that were employed in the collection of data and the availability of specialist reports has prompted the analyses to concentrate chiefly on registered small finds. Ecofactual material, microdebitage and chipped stone are not included. Limited use is made of sherd counts from contexts at Tell Sabi Abyad and Kissonerga- Mylouthkia but not Jerablus Tahtani, as the necessary data is as yet unavailable from this site. The wealth of contexts and finds has also prompted the necessary selection of specific contexts, phases or artefact classes to better enable the adequate analysis of large and diverse assemblages (see below). The justifications for the site-specific context selection are to be found in the following chapters of analysis.

Following, the earlier chapter on site formation processes (**Chapter 2**) it should be clear that a number of factors within and – as is more often the case - outside the archaeologist's control influence the composition of assemblages and subsequently the selection of a suitable data set for analysis. Included among such factors are those obtaining to preservation, the degree of exposure of contexts, the volume of material excavated, the nature of data collection or recording from the site, the necessary existence of specialist reports. For example, it is naturally the case that taphonomic processes have led to the depletion of certain elements of the artefactual record from deposition. However, it is not simply the case that non-carbonised organic remains, for example, will have been lost, (except where conditions of preservation are exceptional as in waterlogged sites) for other more durable artefacts might also have suffered weathering, decay and fragmentation (through natural and cultural agencies) creating a skewing of the proportions of certain classes in the archaeological context of discovery. Equally, sampling strategies and methods of recording must affect the retrieval and usefulness of data recovered and since lost, discarded or destroyed, as has been recognised by many scholars, one of the earliest being Cowgill (1970) (see also Collins 1975). Clearly, many of these factors mentioned above may be considered as being not only various but also site specific in the main; subsequently, they are reserved for consideration by site in the later analytical chapters.

In the following sections the variables considered for study in intrasite and intersite statistical analysis are established. A number of criteria inform the scope and design of this analysis including the categories of artefact, context and the combination of artefactual and contextual information in statistical and graphically inspired analysis of the data.

4.3.2 CONTEXTUAL CLASSIFICATIONS

Initially, it is proposed that assemblages be analysed by context and/or site occupation level. Following **Chapter 3**, lengthy discussion of the history of theory and methodology pertinent to the present study is unnecessary here, however it is worth noting that there is a substantial literature on contextual analysis (e.g. Barrett 1987; Hodder 1987a-b, 1991a, 1999; Hill 1995a; Thomas 2000: 9; see

section 3.2.3). This literature includes some variety in terms of the definition and significance ascribed to the concept of an archaeological context. Hodder (1992: 11-23), for example, argues that the context of deposition serves to restrict the range of potential meanings that an artefact possessed in the past. Alternatively, Yates (1990: 154-202) considers context to be an arbitrary method of attempting to limit the infinite variety of meanings that might otherwise be attached to material things. Tilley (1993) has, in turn, argued that the role of the interpreter is of central importance. Regardless, of the variety or shades of opinion on the issue of context, such literature does serve to highlight the paramount importance of the context of recovery in the analysis and interpretation of artefactual material.

The following contextual analyses rely on the establishment of broad contextual classes such as, for example, buildings, open areas, middens and pits. Categories such as these are widely used in settlement archaeology, and there are criticisms that can be made concerning the assumptions that underlie such value-laden terms. A strong case can be made for the utilisation of a more neutral term such as 'spaces'; however, these frequently used classes are sufficient for present heuristic purposes. Naturally, these broad classes contain sub-contexts (e.g. floors, walls, various installations, different fills etc.) in themselves however these are not generally considered independently in terms of artefact distribution except where issues of chronology or rare episodes of activity are discernible. Generally, smaller units such as ovens, hearths or other fixtures and fittings are subsumed for consideration within larger units of analysis (e.g. room, building, midden or pit).

These larger units of analysis are constructed on the basis of the excavators' interpretations of features and deposits; where possible, they are considered by phase. Clearly, the phasing of activity is important at the intrasite level; facilitating synchronic and diachronic reconstructions of settlement that are often predicated on the differentiation of activity areas. Where horizontal stratigraphy between features is lacking (e.g. as at Kissonerga-Mylouthkia, see **Chapter 7**), the allocation of period can only be based on other relative and absolute dating techniques. These chronological indicators can only achieve a measure of broad contemporaneity or period differences between features; they could not establish exact contemporaneity.

The premise that underlies this approach holds that the context dependant coincidence (associations) of certain classes of artefacts - and their condition and material of manufacture - might variously be considered to illuminate aspects of site maintenance, abandonment and post-abandonment behaviour. A consideration of broad contexts in terms of general intra-feature and site level phasing also affords the opportunity to consider the possibility of diachronic changes in the nature of site maintenance and abandonment strategies.

Using broadly defined terms, it is possible to outline contexts that are generally applicable to each of the sites. For example, each of the sites has larger structural elements (e.g. buildings). However, there are differences between the classification of contexts between the sites of Tell Sabi Abyad (**Chapter 5**), Tell Jerablus Tahtani (**Chapter 6**) and Kissonerga-Mylouthkia (**Chapter 7**). More importantly, it is clear that there are culturally specific distinctions to be made in terms of settlement morphology, structure and the nature of occupation. These are best considered in their respective analysis chapters. Databases documenting artefactual assemblages as they occur by broad context are located in **Appendix 2, 3** and **4**. Those contexts that are considered in the analysis chapters are broadly categorised as follows.

Buildings and rooms

Buildings and rooms are classic settlement contexts defined in the course of excavation and retrieval as well as in the course of spatial analyses (e.g. Verhoeven 1999) or within studies of site formation that frequently focus on households and/or floor assemblages (see, e.g. Schiffer 1987; LaMotta and Schiffer 1999; see also **section 2.6**). Essentially these categories are utilised here to refer to any roofed space. They are terms that will be applied to features from each of the three sites. The constructional components of buildings and rooms (e.g. walls, floor matrices and installations) are also considered where they have produced significant finds.

Open areas

This term covers unroofed intra-mural areas within the built environment of a settlement that are often partially defined (and confined) by the external walls of structures. Within many built environments such spaces are of importance, acting as access routes through the settlement and/or as the loci of a range of activities that may not have been suited to an indoor location (often including craft working, food preparation and cooking). As a separate contextual category for later analysis, open areas only figure in the study of Tell Sabi Abyad (see **Chapter 5**).

Midden areas

Here, Needham and Spence's (1997) definition of a midden is adopted. They define a midden as the product of 'episodic dumping', a feature formed by 'deliberate and persistent acts' over a period of time (ibid.: 80). From a functionalist or behavioural perspective, middens are the outcome of routine site maintenance activities, however a number of scholars have more recently suggested that they may symbolically reflect - in the structure of their contents – other social practices (see, e.g. Hill 1995a-b; Chapman 2000b; additional references cited in **Chapters 2** and **3**). In other words, those contexts that are traditionally labelled as the loci of secondary refuse deposition might be viewed in a different light as deposits that are structured by social actions and values.

Whether, the middens consist of structured deposits, *ad hoc* maintenance activities, or a mix of the two they provide a useful resource for comparisons with other non-midden contexts on settlement sites. Furthermore, where these features exist or can be identified they are of great importance to the present study as they provide evidence of deliberate repetitive activity during the habitation stage of settlement's life. The category of midden is utilised in the analysis of material from Tell Sabi Abyad (see **Chapter 5**) and Kissonerga-Mylouthkia (**Chapter 7**); clear middens are not recognised at the site of Jerablus Tahtani (**Chapter 6**).

Pits

A number of pits are considered within the analysis of occupation levels at Jerablus Tahtani (see **Chapter 6**), however at the site of Kissonerga-Mylouthkia they constitute the bulk of excavated features. These pits are more fully detailed in the course of their analysis in **Chapter 7**, however it should be noted here that they defy any single all encompassing description in terms of their general character and the palimpsest of activities that they may represent. Instead, the Kissonerga-Mylouthkia pits are the products of a range of activities that include quarrying, habitation and middening; indeed, a number of these features are multiperiod in nature and contain numerous phases relating to several such activities. As a consequence, in the analysis and discussion of some of the pits at Kissonerga-Mylouthkia it is useful to borrow the Chapman's (2000b) concept of a life-cycle of pits for in so doing an implicit recognition is made of the temporal complexity of pits that have a colourful and varied history. Notably, the notion of life-cycles of pits parallels interest in the biographies of artefacts (including households). Studies such as Chapman's (see also Hill 1995a) also suggest there can be a structured nature to pit use and deposition. In addition, there has been some recent consideration of the aesthetics of pit deposition (e.g. Pollard 2001) although the character of the Kissonerga-Mylouthkia pits and the data available makes it difficult to investigate artefactual contents and deposition in a similar vein. This category is not used in the analysis of Tell Sabi Abyad (see **Chapter 5**).

Graves

Graves or tombs represent another major contextual unit of study in the analysis of Tell Jerablus Tahtani (see **Chapter 6**). At the site, they take numerous forms including cists, stone chambers and pits. Both single and multiple inhumations are common and some of the interments are rich in grave goods (including pottery, personal ornaments and weaponry). Of particular interest are those that appear to have had a relatively long use-life that saw the repeated burial and re-use involving not only the placement of the newly dead and their associated grave goods but also the displacement of the old. Although burials do occur at Kissonerga-Mylouthkia, they do so in the context of multifunctional pits (e.g. Pit 1) or, in a single case, a building (Building 200) as such they are not considered separately (see **Chapter 6**). A very few infant burials are known from Tell Sabi Abyad but, given their limited occurrence, they are not considered in the analysis of this site.

4.3.3 ARTEFACTUAL CLASSIFICATIONS

In this study it is argued that the fragmentation, deposition and preservation (survival) of artefacts in the archaeological record is affected by a range of factors including the function of the artefact, the material from which it is manufactured, the degree of curation (the investment in the artefact manufacture) and its size. Beyond these formal properties of artefacts and beyond the simple notions of utility, efficiency or replacebility that underlies many studies of artefactual deposition (see **section 2.6**), this study recognises that there can be other values and meanings attached to artefacts (see **Chapter 3**). However, it is maintained here that the appreciation of such meanings is only achievable through the contextual and artefactual analysis of artefactual deposition.

Following the careful consideration of contextual information, a qualitative and quantitative analysis of artefacts by context, broad functional category, material, condition (e.g. complete, damaged or broken), size and manufacture (e.g. to the identification of the artefact as of curated or expedient type), will be attempted. The contextual categories have been outlined in the preceding section; the rest are defined below. Though each of the variables for analysis are listed and described separately, it is often the case that the finish and condition of an artefact are related to its material of manufacture, its function and its context of deposition. A review of other artefactual studies has indicated that weight is another useful variable for analysis, particularly in the consideration of pottery fragmentation, however no data regarding artefact weight is available to this study. For demonstration of the effective use of weight as a variable in analysis see Hill (1995a) who uses counts and weights of sherds to establish mean sherd weight figures that are useful in measuring fragmentation rates and pottery deposition (see also Needham and Spence 1997).

BROAD FUNCTIONAL CATEGORY

In this study, broad functional categories form the main units for analytical consideration. The form that the artefact classification should take has proved a problematic issue for a number of reasons. First, this study deals with material from different sites - sites that have produced artefactual material that has already been classified in different traditions and material that in formal terms does not always conform to an intersite classification scheme. Although this problem is lessened by the fact that each analysis is undertaken separately and that intersite comparisons at a functional level are not sought, an effort has been made to restrict the number of categories for consideration in order to simplify analysis. Second, this simplification is predicated on the decision to move away from the minutiae of individual artefact details and lengthy discussions of typology or function. Artefact typologies are fraught with difficulties and limitations. For example, the elucidation of artefact function is hampered by the lack of secure first-hand knowledge about the nature and context of its use in the past. Typologies are also complicated by the appearance of multifunctional artefacts or of artefacts that have been used in another function or by artefacts being fragmentary or otherwise damaged. Equally important is the fact that classification of artefacts invites consideration of their function particularly as many artefacts owe their very names and identification to their supposed function. A number of recent studies have indicated that the functional naming of things is problematic. For example, Allison (1992, 1995, 1999) has demonstrated the difficulties created by existing typologies of Roman artefacts whose terminology and function are founded on Victorian assumptions of function that were themselves initially based on their formal likeness to contemporary 19th-Century objects.

It should be noted however that this study does not attempt to reconstruct the subsistence, maintenance or other activities associated with everyday domestic activity; thus, sophisticated typologies are not employed here. Nevertheless, typological classification serves as a useful heuristic device. Thus, in the present study the categorisation of artefacts into broad functional groups serves as a heuristic method for placing the data into more manageable groups for comparative analytical purposes (see **Chapter 4**). The emphasis of the present study is on the deposition and abandonment of artefacts; to this end, although broad functional category might have had an impact on the deposition of artefacts it is argued that the functional category of an artefact during its use-life does not necessarily relate to its treatment at the point of deposition. This is not to deny that certain artefacts serve particular functions during their use-life and may be related to particular activities but instead to make the point that their find spot is not necessarily the same as the space wherein such activity occurred (see **Chapter 2**).

Given that this thesis is principally concerned with the impact of site maintenance and abandonment activities, the focus is on the treatment of artefacts as 'refuse' rather than as work-a-day objects of prescribed functions, whose distribution is simply representative of spatially zoned or organised activities. Concern with synchronic reconstructions of everyday subsistence or craft activities and the function of space, for example, can lead one away from the other potential interpretations regarding the meanings attached to artefactual material that has been discarded as refuse or abandoned for some other reason.

With the above in mind, it is necessary to define limited criteria for classification that will endeavour to avoid lengthy discussion on the individual artefact's systemic function. The terminology and classifications that are employed at the intra- and inter- site levels have been standardised to a certain degree. This has not been done blindly as it would be naïve to suggest in so doing that there are standard packages of artefact types and assemblages as well as an absolutely standard series of functions or activities represented by such artefacts across vastly different temporal or spatial boundaries. Thus, it is to be expected that certain artefact categories occur only at specific sites within the present study.

The reader is referred to **Appendix 1** where a list of artefact types found in the database is provided together with a short consideration of the individual artefact functions. Below there follows definitions of the broad functional categories that are utilised in this study.

Storage and Administration

This category covers artefacts such as tokens and sealings (with or without impressions) that are commonly associated with record keeping (or accounting) and storage (see, e.g. Akkermans and Duistermaat 1997; Schmandt-Besserat 1977, 1985, 1986, 1992; Zettler 1987).

Artefacts associated with this category are found at both Tell Sabi Abyad and – albeit to a lesser extent - at Tell Jerablus Tahtani. In the case of the former, the majority of artefacts from this category comprise tokens and sealings of clay. At Jerablus Tahtani, the majority of registered artefacts assigned to this category comprise sherds with seal impressions. The category is not applicable to material from the site of Kissonerga-Mylouthkia where tokens and seal impressions have not been recovered.

Personal ornament

This category covers a broad range of artefacts commonly worn about the person and includes, for example, beads, necklaces, bracelets, pins and labrets.

Weaponry

The category of weaponry covers artefacts such as daggers, knives and spearheads that occur - on occasion - only at the site of Jerablus Tahtani. These are predominantly of copper alloy and are generally recovered from the tombs at the site. Altogether, given the limited nature of their occurrence both contextually and quantitatively, artefacts associated with this category will receive only limited attention.

Heavy processing equipment

This category covers the majority of the ground stone artefacts. The majority of such artefacts are used in grinding, hammering and pounding actions, predominantly associated with the processing of foodstuffs and/or pigments.

Cutting tools

This category comprises axes, adzes and chisels. Selection of the term 'cutting tools' for this category of artefact is arguably misleading in its attribution of function for not all such artefacts were for cutting.

Textile production

This category covers artefacts that are commonly associated with sewing and textile production. Such artefacts are largely made from bone and pottery and include awls, needles and spindle whorls.

Perforated discs manufactured from pottery sherds are also included in this category. Their inclusion is made on the basis of some existing studies that have argued that this class of artefact served as rudimentary spindle whorls (e.g. Keith 1997: 136-9; see also Akkermans 1993a: 159-60; Liu

1978). However, Peltenburg (Peltenburg 1998a: 198-9) has argued that similar artefacts from the largely Chalcolithic site of Kissonerga-Mosphilia are of unknown function and suggested that they are too light to be used as spindle whorls.

Ideology/Ritual

This category covers artefacts that by their form or contextual associations are most readily interpreted as having some symbolic or ideological significance (e.g. figurines).

Containing equipment

This category includes both stone and pottery vessels, as well as pot lids, stoppers and pot stands. Only those pottery vessels that were recovered as whole pots or those pots that can be presumed to have been complete at the point of deposition (i.e. that are reconstructible) are included. There is naturally some difficulty in any counts involving such items that are reliant on painstaking reconstruction and hence counts might be expected to frequent represent a minimum figure.

Projectiles

This category is only applicable to the sling missiles recovered from some contexts at Tell Sabi Abyad (**Chapter 5**).

Other

This category covers a range of artefact classes that do not fit those categories above (e.g. because they occur rarely or are too fragmentary for identification). In the main such artefacts will be considered under the general term 'other' except where there are extraordinary patterns of occurrence/abundance of particular artefact classes.

Pottery

Sherd counts are utilised from contexts at Tell Sabi Abyad and Kissonerga-Mylouthkia for the purpose of investigating potential comparisons between pottery and small find assemblages. No sub-divisions are maαe in terms of wares or vessel forms. The requisite pottery information is not yet available for Jerablus Tahtani.

MATERIAL

Material refers to the material from which the artefact is manufactured. Material categories include stone, clay, pottery, metal, bone and antler. The material of an artefact is considered an important variable as it impacts on many aspects that relate to its use-life, condition, size, deposition and survival in the archaeological record.

Certain materials (of a durable nature) lend their selves to reuse and recycling both in their original and/or in another function. Artefacts of stone for example are durable; they can not only be resharpened or reworked (e.g. axes or adzes), they can also be used in new ways (e.g. an axe might become a hammer or a quern can be used as construction material in walls or pavements). Similarly, pottery sherds – though subject to further fragmentation – are quite durable and can be reused in a variety of ways. For example, they can be used to make a solid floor, they can be used as pot burnishers or they can be reworked and pierced to create perforated discs that - as some scholars have argued - served as spindle whorls (e.g. Keith 1997: 136-9). Conversely, certain other materials are less durable than pottery or stone (e.g. unfired clay or bone); thus, they can be more affected by post-depositional formation processes. And yet the durability of its material need not be directly correlated with an artefact's survival or treatment, as clearly other socio-cultural and economic factors will have played their part in the choices that people made.

The use of material as a variable in this study is at a general level, however, it should be noted that identification and characterisation of raw materials and their sources provides useful data for interpretation of strategies surrounding resource procurement. Thus, though this study is not intent on looking into raw material sources it should be recognised that the provenance of stones or other material used in the manufacture of certain artefact types can potentially be informative of trade, exchange and other aspects that impact on the socio-economic and symbolic value of the artefact. However, it should be noted also that many of the materials used in the manufacture of artefacts at the sites considered here were either readily accessible or locally available (see, e.g. Kissonerga-Mylouthkia with its close proximity to pebble beach and calcareous rock outcrops).

CONDITION

This variable refers to the condition of an artefact as it entered the record or as it survives the rigours of various cultural and non-cultural formation processes (see **Chapter 2**). A twofold division is made that rests on whether an artefact was complete (and therefore still useable in its original function), or damaged and/or fragmentary at the time of deposition. Traditional (functionalist) approaches to artefact condition would hold that the condition of an artefact after prolonged use directly influences its discard and preservation. Thus, for example, artefacts that become too heavily worn or broken during their use are less likely to be retained, reworked or recycled. Naturally, functional and material characteristics will impact on the condition as noted above; consequently, certain artefacts see greater wear and tear than others through the nature of their use or the durability of their material of manufacture.

There are, however, many other factors that will impact on the condition of an artefact, factors that are not dictated simply the functional or physical properties of an object but which relate to symbolic and social values, customs and beliefs. Given the earlier discussion of the meanings that can be attached to artefacts and the variety of treatment that they can receive prior to and at the point of their deposition (see **Chapter 3**, especially **section 3.3**) repetition is unnecessary here. Nevertheless, it should be emphasised that artefacts can be subject to deliberate defacement and fragmentation and they can also be carefully and selectively deposited in a non-random fashion that is alien to our modern conceptions of refuse and its proper treatment at the point of disposal.

Finally, the intention is not to simply advocate a simple equation between condition and usefulness (although a relationship between the two may well exist in many instances) but rather to create a further variable that might be considered for patterning and interpreted in terms of both practical and symbolic meanings.

SIZE

The category of size simply refers to dimensions of any given object (e.g. length, width, thickness (and/or height) or diameter where applicable). The importance of artefact dimensions to the deposition and recovery of artefactual material has been recognised in a number of studies. In particular, it should be noted that archaeologists have, separate to microscopic analyses, suggested that size bears directly on the chance of an artefact being recovered from a primary or secondary context of deposition. Smaller artefacts being – as some have argued - more likely to be lost and incorporated into the floors of activity areas through trampling (e.g. Rosen 1986: 94; Schiffer 1983: 679). Schiffer (1976, 1987) was first to point out that size was a factor in the loss, retrieval and survival of artefacts and assemblages, arguing that small artefacts are more easily lost and less noticeable during routine cleaning activity. Conversely, larger artefacts can present a greater obstruction or hindrance and are thus, so it has been argued, more likely to be is removed from the site and disposed of elsewhere during habitation. However, the attractiveness and visibility of particular materials or artefact forms also affect their survival; subsequently, beads, pendants and other attractive small artefacts might be noticed and recycled. The veracity of this contention will be tested against smaller artefacts recovered from the three sites analysed in the present study.

A number of scholars have followed the work of Schiffer with analyses of assemblages using such variables as size (sometimes in tandem with weight). For example, there have been studies that have analysed the weight and size of artefacts or debris in order to identify the effects of various natural and human agencies on the formation of the depositional record (e.g. Bradley and Fulford 1980; Kirkby and Kirkby 1976; Gifford 1978; Halstead et al. 1978; Fladmark 1982; Stevenson 1985: 75; Deal 1985: 263; Wilk and Schiffer 1979: 533). Some studies have used modern examples to illustrate their argument (e.g. Deboer 1983). In the present study, the longest dimension is used to pattern differences in average artefact size at the intra-site level.

CURATION AND EXPEDIENCY

An additional interest of this study is the influence of the factors of curation and expediency on aspects of an artefact's form, transport, storage, deposition and reuse. The term curation has been applied to the strategy of caring for tools and toolkits that usually involves a high degree of manufacture. Strategies of curation and expediency have been commonly recognized in chipped stone assemblages (e.g. Binford 1973, 1977, 1979; Torrence 1983; Bamforth 1986; Andrefsky 1994), however they may be usefully applied to other categories of artefacts such as ground stone (e.g. Frankel and Webb 1996; Webb 1998).

By definition, curated artefacts are those that have been worked and modified for specific tasks. Such artefacts might have seen a degree of reworking and maintenance (e.g. the resharpening of cutting edges) and have only been discarded when exhausted or broken. In other words, curated artefacts are those whose manufacture has required a significant investment in time and energy (in relation to other artefacts) both in their manufacture and often in the procurement of raw material. As a result of the effort involved in the creation and maintenance of curated forms it is also the case that these tend to be more standardized and hence they are more easily assigned to formal typological categories.

Expedient artefacts are those that require a minimum of investment in their manufacture and in the procurement of raw materials; invariably, they constitute a situational response to immediate needs. A number of studies have demonstrated that the time and place of use of expedient artefacts can often be highly predictable (e.g. Binford 1977b; Bleed 1986; Nelson 1991; Shott 1989), although it is not necessarily the case that all expedient artefacts were immediately disposed of following use. In general, expedient artefacts tend to be more amorphous and exhibit a greater variety in their form, which creates difficulties when it comes to typological classification.

Later analysis and interpretation of data in terms of curation and expediency is directed towards reaching some understanding of how strategies of curation can impact on the discard and abandonment of material in different contexts. However, it should be realised that the distinction between curated and expedient artefacts that is used here is quite unrefined as there is no allowance for subtle variations in the investment of time and technological effort involved in the creation and maintenance of particular artefact classes. Indeed, such refinements would require experimental studies and necessitate sub-divisions that are beyond the scope of the present study. Furthermore, although it may be generally presumed that variations in the investment of time and technological effort involved in the creation and maintenance of particular artefact classes affect their rate of deposition and their condition on deposition it is not a certainty. Thus, where curation does not seem to equate with the normative view of the relationship between an artefact's condition and its deliberate deposition, interpretations beyond those built on functionalist assumptions must be entertained.

Vertical dimension of artefact deposition

A limited investigation of the artefacts by vertical heights within room fills is also attempted for contexts from Tell Sabi Abyad alone (see **Chapter 5**). The reasons for the differential treatment of Sabi Abyad over the other two sites and for the selection of only certain contexts are several. First, Sabi Abyad produced the necessary level of three-dimensional recording of artefact find location, which is the case for some contexts at Kissonerga-Mylouthkia (e.g. Building 200) but not for Jerablus Tahtani. Second, although the system of recording is standard across the site of Sabi Abyad it remains the case that not all artefacts and contexts were recorded to the same three-dimensional standard. Third, many contexts produce relatively few finds and therefore there is little merit in plotting them vertically. Fourth, certain burnt contexts at Sabi Abyad have proved extremely rich and have been already considered in terms of *in situ* activity (see, e.g. Verhoeven 1999). Consequently, the plotting of artefacts by height and horizontal location provides an opportunity to investigate the spatial analysis of these contexts that are predicated on the assumption of the broad contemporaneity of deposition. Fifth, picking up on the latter point, through a limited use of vertical distributions in rich burnt contexts it is intended to demonstrate the need to reconsider archaeological assumptions on which spatial analyses of artefact distributions and room fills are founded, even in the most 'Pompeii-like' conditions.

4.4 Method for the statistical and graphical analysis of artefactual data

The analysis of each variable and the possible relationships that might exist between variables will be conducted using relatively straightforward statistical techniques and graphical support.

The statistical techniques that are applied include simple counts, percentage proportions of different categories and the limited application of the Robinson coefficient of similarity. The Robinson coefficient (Robinson 1951) has been applied as a simple measure of similarity between the categories of broad function. This coefficient totals the percentage differences between defined categories for pairs of archaeological assemblages (Shennan 1997: 233-4). The formula is as follows:

$$S = 200 - \sum_{k=1}^{p} [P_{ik} - P_{jk}]$$

where P is the percentage representation of attribute or type, K is assemblage i and j

It should be noted that there are numerous drawbacks to this statistical technique (Doran and Hodson 1975). Nevertheless, the use of such relatively low-level statistics is designed to give added credence to patterns that may be more intuitively inferred from simple averages, standard deviations and graphical presentation. More advanced statistical techniques are avoided for - aside from criticisms of the weakness of such approaches or the validity of conclusions that may be reached - it is also the case that more straightforward statistical techniques like the Robinson coefficient are better known to archaeologists; subsequently, they are more readily repeatable in future studies. Analysis also involves graphical presentation in the form of histograms and scatter plots of numerical (counts and percentages) variables, including counts of presence/absence, figures for abundance and average dimensions.

4.5 EVALUATION OF METHODOLOGICAL APPROACH

Some consideration and evaluation of the merits and limitations of the variables considered and the methodological and statistical approaches utilised in their analyses in the light of results from case studies is undertaken. In particular, such an evaluation is directed to the consideration of a range of issues raised in Chapter 3 obtaining to the character of artefacts and of refuse and of archaeological assumptions including those made by the present study. This is a recursive exercise in the vein of recent theoretical and methodological studies of the archaeological process from theory through to interpretation (Hodder 1999).

A number of limitations may be highlighted in advance and have been – albeit indirectly – in preceding chapters (see, e.g. **section 2.5**). For example, methodological approaches are undermined by excavation and retrieval strategies. Where no guarantee can be given that the assemblage is fully representative of the total that is preserved within a particular context there will be some real doubt as to the validity of the sample. This is particularly true where we cannot be certain of a random sampling or collection procedure being adopted, as certain artefacts and materials are more visible and therefore more likely to be recovered (see, e.g. Hill (1995a: 4) regarding the biases that exist in the recovery of small finds from Iron Age sites in Southern England). These and other factors must affect this study. However, there remains great potential in the archaeological record to provide new insights into past human activity and social practices through the (re)analysis of excavated contexts and recovered artefactual information.

4.6 REVIEW

This study implements a method that analyses a broad swathe of artefactual and contextual information with the aim of identifying and interpreting aspects of artefactual deposition and past human behaviour. A range of artefact variables are considered including broad functional categories, material of manufacture, condition, size and curation (this data has been entered into the accompanying databases according to site and broad context; see **Appendices 2, 3** and **4**). These variables are individually analysed and compared in order to identify potential relationships or associations between variables. Though it is appreciated that there is an inevitable degree of subjectivity to the assessment of a number of these variables (e.g. the condition of an artefact) it is important that there is consistency to allow reasonable, intelligible and repeatable comparisons to be made between contexts and sites.

Contextual analysis is conducted with the aim of establishing - where possible - a broadly synchronic impression of artefact occurrence and distribution across the site. This analysis is based on the already established site phasing and involves the comparison of contexts that are of both a similar and dissimilar character. The intention is not to attempt a conventional activity-led reconstruction of the use of settlement space during the habitation stage of each site but to pattern similarities and differences between the various feature assemblages in terms of the information that they provide on the treatment of artefacts and settlement space in the finally stages leading up to and after their abandonment. In addition, a further aim of this study is to assess, where possible, the patterning of artefactual distributions at the diachronic level. This assessment will not be directly tied to the interpretation of changes in the function and utilisation of settlement space during habitation. Instead, it will be directed to the interpretation of changes in the meanings and values attached to objects that may be manifested in their treatment at the point of deposition, in their condition on abandonment, or in the associations between artefacts. In essence, the question to be addressed in the diachronic investigation of artefactual patterning at the sites is whether or not there is continuity or change in artefact deposition through time and, if so, how might this be interpreted.

To conclude, a principal aim is to bring to the fore the importance of cultural formation processes as social practices. Site maintenance strategies are of great interest but abandonment behaviour is seen as an area of still greater potential. Operating in tandem with the interpretation of data in terms of site maintenance and abandonment behaviour is the attempt to recognise and isolate intentional from inadvertent acts of artefactual deposition. This relies on patterning similarities and differences between artefactual assemblages and their contexts of deposition. In adopting this approach to the contextual analysis of artefactual material, archaeological assumptions regarding function and the use of space are questioned and studies that neglect cultural site formation processes challenged. This is not approached solely through the criticism of the flaws in past approaches, as the analyses are designed to investigate the positive benefits of interpretations that focus on social practices associated with artefactual deposition during the habitation and abandonment of sites. Furthermore, the aim is to investigate artefact deposition in order to make the point that contexts should not be under valued when they are termed trash areas or rubbish dumps but rather analysed for the possibility that there is meaning to their form and character; a rationality behind their patterning. Thus, a particular emphasis is placed on the elucidation of the rationale behind the treatment of artefacts and settlement areas up to, during and after their abandonment. However, it is intended that in the interpretation of analyses there be a balance struck between assessment of the practicalities and of the potential symbolic meanings attached to artefactual deposition. Indeed, as noted in **Chapter 3** (see **section 3.5**) interpretations that over emphasise symbolic or cosmological aspects of past societies are guilty of minimising the practicalities of daily existence.

Finally, it is important to remember that each site presents a specific case for analysis, not only in terms of morphology, geographic location, chronology or methods of excavation and retrieval strategies that were employed but also in terms of the site formation processes (natural and cultural) that have operated on them. In particular, it should be recognised that local strategies and social practices were involved in the deposition of artefacts and the formation of the archaeological record preserved to us. The distinct character of each case study requires flexibility in the analytical methods that are employed. With this in mind, each of the analysis chapters contains sections rehearsing individual, site-specific, characteristics that impact on their analysis and the method employed.

CHAPTER 5

ANALYSIS OF TELL SABI ABYAD, SYRIA

5.1 THE SITE

The site of Tell Sabi Abyad I (translated from the Arabic as 'mound of the white boy') is located in the upper section of the Balikh valley, North Eastern Syria, about 30km south of Tell Abyad on the Syro-Turkish border (Akkermans 1993a: 15-34) (**Figures 1** and **2**). The Tell is the largest of a cluster of four (numbered Tell Sabi Abyad I to IV) that are locally known as Khirbet Sabi Abyad. These ancient sites are located in linear fashion suggesting that they were situated along a prehistoric wadi, possibly the Nahr et-Turkman (a branch of the Balikh river).

The focus of the present analysis, Tell Sabi Abyad I, was primarily occupied in the Late Neolithic, during the second half of the 6th millennium B.C. Tell Sabi Abyad II is a small Pre-Pottery Neolithic B site of the second half of the 7th millennium B.C.. Tell Sabi Abyad III is another small Pre-Pottery Neolithic mound. Lastly, Tell Sabi Abyad IV is a Halafian mound that is now used as a graveyard by villagers from Hammam et-Turkman nearby.

5.2 HISTORY OF EXCAVATIONS

Tell Sabi Abyad I, has been the focus of extensive excavations since 1986 (**Figure 3**). The largest of the cluster of four, the Tell measures circa 4.5 hectares at its base and rises to between 5 and 10 metres above the modern field level. Despite appearing as a single mound, the modern Tell is in actuality an agglomeration of four small, mainly prehistoric mounds that have coalesced through time. Investigations have been carried out on top of the Tell, and on its northeastern and southeastern parts. The excavation trenches at the top have uncovered the substantial remains of a Middle Assyrian border fortress and governor seat surrounded by domestic structures and dating to the late 2nd millennium B.C. These remains cover the lower prehistoric strata. Narrow trenches on the northeastern mound have reached late 6th millennium remains (ca. 5300 B.C), producing material that corresponds to that found in the lower strata of the southeastern trenches. The excavations of the latter have been more extensive, uncovering an area of ca. 1400m^2. More recently, there have been further excavations on the southwestern part of the mound that have also uncovered Late Neolithic levels but these do not form a part of the present analyses. Eleven main phases of occupation have been identified to date in publication (Verhoeven and Kranendonk 1996).

Levels 11 to 8 represent the earliest stages of the Pottery Neolithic dated ca. 6000/5900 – 5300 B.C. These fit into the local Balikh II period (Akkermans 1991a-b, 1993a: 111-113). Level 11, may be placed into IIA on the basis of ceramic evidence (ca. 5700B.C.) but analysis of flint and obsidian suggest Balikh IIB (ca. 5600 B.C.). The deep sounding in P15 indicates a break in occupation between levels 11 and 10 of as much as 200-300 years that possibly corresponds to the pattern of desertion recognised at other sites at the start of the 6^{th} millennium (known as the hiatus Palestinien). Levels 11-8, have been ascribed to local Balikh IIC phase, spanning a period of ca. 5500 to 5200 B.C. Levels 7-1 that belong to the Balikh III period from 5200 to 5000 B.C.. The Balikh III period is subdivided into IIIA and IIIB at Sabi Abyad, with IIIA (levels 6-4) covering the transitional period between the earlier Pottery Neolithic and the upper Early Halaf and IIIB covering the topmost Early Halaf levels (3-1). This sequence provides important information regarding the local development of the Early Chalcolithic Halaf culture out of Neolithic traditions. At all the other investigated sites there appears to exist a hiatus between earlier Neolithic layers and the Early Halaf. The Halaf occupation at Tell Sabi Abyad I, as represented by one well-preserved building, appears to have been limited with a concentration on the upper eastern slope of the mound (Nieuwenhuyse 1997: 229).

The transitional period (7-4) is of particular relevance to the present study, with its chief focus on Level 6 and much lesser focus on Levels 7 and 5. The architectural tradition associated with these levels incorporates large multi-roomed rectilinear structures (particularly in Level 6), circular (tholoi) structures of various sizes (and presumably function) and various fixtures and fittings (e.g. ovens, hearths, platforms, benches), many of which appear to have been in unroofed spaces. The larger part of the mound also seems to have been used for open-air activities (Akkermans 1989b: 19-22; 1993a: 48).

5.3 PREVIOUS RESEARCH

As the subject of 12 seasons of excavations since 1986, Sabi Abyad has appeared in a number of preliminary excavation reports and other publications (e.g. Akkermans 1987a-b, 1988, 1989a-c, 1991b, 1993a, 1993/94a-b, 1994, 1996; Akkermans and Le Miere 1992; Akkermans and Rossmeisl 1990; Akkermans and Verhoeven 1995; Akkermans, Limpens and Spoor 1993). The most comprehensive report on excavation and material from 1991 to 1993 seasons was published in 1996.

Tell Sabi Abyad I has also been the focus of a published PhD dissertation by Verhoeven (1999). This work is of particular interest to the present study by virtue of its focus on the spatial analysis of Burnt Village (Upper level 6). In addition, Verhoeven has also recently produce two smaller publications concerning aspects and material from Burnt Village Level 6 (2000a, 2000b).

5.4.1 VERHOEVEN'S STUDY OF TELL SABI ABYAD, BURNT VILLAGE LEVEL 6

In *An Archaeological Ethnography of a Neolithic Community – Space, Place and Social Relations in* *the Burnt Village at Tell Sabi Abyad, Syria* (1999), Verhoeven approaches the study of the Burnt Village (Level 6) through the investigation of spatial distributions of various artefact assemblages within in situ deposits, largely located in buildings. With some care he assigns various artefacts to different functional activities and by extension he assigns activities to various buildings and spaces. Verhoeven recognises that the attribution of function to specific activities is problematic, and he uses ethnographic analogies to endorse his own functional categories.

At a more interpretive level, Verhoeven argues that the difference in the function and form of architecturally defined space relates to the socio-economic structure of the community as a whole. In doing so he allies himself to post-processual approaches that accentuate the role spatial structures play as media "through which social relations are produced and reproduced" (Verhoeven 1999: 15). In particular, he adopts the theoretical (structuralist) framework of Bourdieu's *Theory of Practice* (1977). Within this structuralist framework terms such as practice, structure and habitus figure, referring to the formal and everyday aspects of the community and community life (Verhoeven 1999: 17-18). Practice refers to architecture and material culture as the outcome of human actions. Habitus refers to the cognitive framework built of habits, customs, ideas, values and experience that are largely unconsciously used for the interpretation and attribution of meaning to material objects. Structure, a concept that is less well defined by Verhoeven, refers to the hidden and unconscious relations between practice and habitus, between the cognitive or symbolic and the material worlds. It is not my intention to detail further Bourdieu's and by extension Verhoeven's theoretical stance as aspects of Structuralist approaches to the study of space have already been touched on (see **section 3.2.2**). Here, however, it is important to recognise that it is this theoretical stance and his belief that he can reconstruct the village social organisation through the spatial analysis of the archaeological data that gives reason and optimism to Verhoeven's research goals. As Verhoeven writes:

> *Practice* can be analysed by reconstructing architecture, the use of space and the organisation of activities, i.e. by contextualizing material culture. *Structure* and habitus can be reconstructed by delineating patterning in architectural layout and material culture. (ibid.: 20)

In the course of his work, Verhoeven highlights the difference between the rectilinear multi-roomed structures and the round 'tholoi' structures identified in the Burnt Village. The larger tholoi are associated with domestic activities whereas many of the substantial rectilinear multi-roomed structures are given over to storage (presumably to the storage of agricultural produce) and various other activities. Associations between artefactual distributions and architectural design (and to a limited extent paleoenvironmental information) are used to support his reconstruction of function and his definition of space. At another more abstract level these differences in function and form are seen as an expression of community level social relations. Thus, Verhoeven creates (after Bourdieu) a series of related binary oppositions that have a physical manifestation in the architectural division of round versus rectangular. These are Verhoeven's *structuring structures* representing the socio-economic division of the Level 6 Neolithic community into nomads and residents respectively with the rectilinear structures representing storage for the nomadic population and the round structures representing the dwellings of resident farmers.

5.4.2 A CRITIQUE OF VERHOEVEN'S STUDY

Having provided a fleeting summary of Verhoeven's theoretical approach to his spatial analysis of the Burnt Village at Tell Sabi Abyad it is necessary to critically consider some of the theoretical and methodological assumptions underlying his work that serve as a point of divergence from the present investigation. Of key interest here are Verhoeven's sections dealing with site formation processes, his outline of two scenarios and his model for spatial analysis. In regard to the first of these (e.g. site formation processes) Verhoeven is unusual in his efforts to invoke the work of Schiffer and others in categorising analytical units for consideration. However, although any consideration of site formation processes is preferable to their complete neglect, it is arguably the case that Verhoeven pays site formation processes rather superficial attention. In particular, he makes a number of unfounded assumptions regarding their character and their ease of identification that ultimately derive from Schiffer's seminal works on the subject (1976, 1987). As it is his intention to undertake a spatial analysis of the village, Verhoeven is principally concerned to secure the validity of his equation of artefactual distributions with activity through establishing the character of the *in situ* contexts with which he is working. This concern is demonstrated early on in his introductory chapter where he states:

> With regard to tell settlements in the Near East, in-situ distributions of objects are in many instances the result of catastrophic fires, quickly covering, and thereby fixing objects. Thus, if a fire suddenly destroyed a settlement, and if the site has subsequently not been heavily disturbed the original distribution of prehistoric objects can be reconstructed. (1999: 7)

This lays the foundation for his justification in regarding assemblages from the burnt deposits of Level 6 as *in situ* and therefore spatial indicators of past human activities. To facilitate this, Verhoeven makes the distinction between *in situ* contexts and secondary contexts a clear-cut one. Thus, *in situ* contexts are those containing material left "at their latest places of use", they are "unintentionally abandoned" and the systemic inventories are largely left intact. Conversely, secondary contexts "are the result of planned abandonment" containing artefacts that are removed from their place of use. In the case of the former Verhoeven writes,

> The fact that objects in in-situ contexts may have been left in their last places of use, make these contexts most suitable for spatial and functional analyses, i.e. for the reconstruction of the function of spaces. Moreover, systemic inventories are less depleted as [sic] in secondary contexts. (1999: 46)

It is not simply that they have been left; it is that they have been left unwittingly or unintentionally because there was no time for the departing inhabitants to significantly alter the systemic inventory. However, this distinction between primary and secondary contexts of deposition is not straightforward. Verhoeven recognises that after abandonment both primary and secondary contexts may be affected by various formation processes and stresses the importance of considering them by initially highlighting the shortcomings of two studies (Daviau 1993 and Voigt 1983) that fail to consider the impact of formation processes on object distributions (1999: 47). He then proceeds to list the various discard processes, disposal modes, reclamation processes and disturbance processes that he considers applicable to the Burnt Village. In doing so it is apparent that he is greatly reliant on the work and classificatory system of Schiffer (see **Chapter 2**, especially **section 2.3**). It is interesting that Verhoeven makes such a distinction between discard processes and other disposal modes. It is a distinction that reflects the study's principal focus on the spatial analysis of *in situ* material that is considered largely to fit one of three main categories of discard process: primary, secondary and provisional refuse.

Verhoeven also lists separately a series of reclamation and disturbance processes (e.g. earth-moving, trampling, erosion/deterioration (including chemical, physical, biological, aeolian and hydrological processes), faunalturbation and floralturbation, and graviturbation) (see also **section 2.4**). These he suggests can be expected to operate at Sabi Abyad, however with regard to the Burnt village their impact is presumed to be minimal:

> However, due to the fire, most parts of the settlement will have been covered rapidly by burnt debris… The floors of burnt structures covered with objects in primary contexts were generally untouched by erosion processes. It is also not expected that faunal and botanical agents, such as burrowing animals and plant roots, have resulted in large disturbances; during excavation such 'bio-turbations' were not attested. (1999: 43)

Little further mention is made of the impact of such disturbance processes on the following analyses and interpretations. Most notably there is little consideration paid to the operation of abandonment processes and their potential impact on contexts and artefactual assemblages; indeed, more is made of reclamation processes (post-abandonment processes). Instead, Verhoeven concentrates on the ritual aspect of the conflagration and skirts over the implications of deliberate abandonment behaviour for artefactual assemblages. The effect is to create the impression that there is only the before of primary and secondary refuse deposition (habitation stage) and the after of various reclamation and disturbance processes (post-abandonment stage). Yet, as noted in **section 2.3.2**, abandonment processes can have a profound impact on the character of assemblages (e.g. Cameron 1993: 3; Schiffer 1987: 89-98).

Verhoeven proposes two scenarios, in both of which he assumes that complete artefacts within floor/surface deposits are taken to represent *in situ* (primary) material. It is his contention that the floor/surface (together with deposits lying on the surface within the arbitrary distance of 15cm above the surface) finds are *in situ* (Verhoeven 1999: 22). However, other studies have produced evidence to the contrary to suggest that it would be a mistake to assume that any floor surface in an abandoned structure represents a 'brief moment, or slice, of time' (e.g. Rothschild et al. 1993: 136). Even in respect of the floor assemblages of burnt structures, some have cautioned against drawing untested inferences concerning their systemic integrity (Lightfoot 1993: 175). Arguably, then, Verhoeven does not adequately test the equation of floor assemblage with systemic inventory. In circumstances of catastrophic destruction one may expect mixing of material on the floor with material from the roof and material from structural elements of the buildings. Equally it is not to be presumed that there has been no other significant disturbance. Most significant, however, is the interpretation of events. Anticipating what follows below it is important to ask the question: Are we dealing with a sudden Pompeii-like disaster or as more likely a planned and deliberate event? In the case of the latter – in particular - the definition and identification of *in situ* contexts would be more complex than Verhoeven surmises in his study.

The first scenario outlined by Verhoeven (labelled the *maximal* approach) includes broken and complete objects with an assumption that the broken artefacts were actually used in the context of their deposition. This implies that the village was still functioning when the fire broke out and that artefacts occur in use rather than discard contexts. The problems that Verhoeven identifies with this scenario concern the presence of refuse left inside buildings that are in use and the absence of complete vessels and few complete objects (1999: 60-61). In the second scenario (the *minimal* approach), broken artefacts are discounted because, by being secondary refuse, they are removed from their context of use. This implies that large parts of the village were being abandoned or were already deserted, as secondary deposition in such contexts - according to Verhoeven - implies abandonment and disuse.

The problems related to the second scenario concern the absence of stratigraphic evidence that buildings were in disuse, the presence of some complete objects left behind and the ability of a supposedly dismantled village to burn so fiercely (ibid.: 60-61). However, despite these reservations, Verhoeven favours the second of his scenarios for the final stages of the Burnt village occupation, arguing that parts of the village were already abandoned when the fire broke out (ibid.: 201). However, he argues that the abandonment was rapid, some complete objects were left behind because when the fire started they had no chance to collect them and the fire burnt so because there must have been enough wooden building material still present (ibid.: 201). Behind this lies the assumption, as footnoted by Verhoeven, that there is a "positive correlation between the duration of the process of abandonment and the possibility of removal (and actual removal) of complete objects from a village" (ibid.: 199). A statement such as this reflects the assumptions of function and utility that underpin many of the processualist inspired writings on site abandonment processes. It is in reaching such conclusions that Verhoeven displays both the weakness of his approach in terms of site formation, and his failure to properly consider a large body of literature concerning abandonment behaviour and discard processes (e.g. Cameron and Tomka 1993; Creighton and Segui 1999; LaMotta and Schiffer 1999). For, if he is proposing that a considerable quantity of refuse is indeed abandonment stage or secondary and also that there was a systemic depletion prior to the firing of the settlement, then serious questions must be raised as to the validity of artefact assemblages in floor/surface deposits (to a depth of ca. 15cm) as indicators of *in situ* activity. If the Burnt Village is the product of a deliberate and planned act of abandonment (whether in whole or in part) and not a sudden catastrophic event then can we really be so confident that material left on floors or surfaces is *in situ*? (see, e.g. Cameron 1993). The answer is no.

Verhoeven's spatial analysis is built on the successful assignment of objects to one of the three functional classes of spatial units, namely: activity area, storage areas and discard areas. The definition of an activity area, provided by Verhoeven (1999: 18), is "a spatially demarcated area where a specific task or a series of related or unrelated activities have been carried out" (see Kent 1984: 1). Activity areas are identified by "specific structures or features, tools, debris and raw materials (e.g. Flannery and Winter 1976; O'Connell 1987)" (Verhoeven 1999: 18). A storage area is simply a place where objects are stored and therefore displaced from their context of use (see Schiffer 1972: 158). A discard area is an area where objects and goods are deliberately discarded. This demarcation of space into activity areas is broadly founded on earlier approaches. In particular, there is a debt owed to processualist scholars (e.g. Kent or Schiffer); interestingly, such a conceptualisation of the built-environment also parallels the work of Voigt (1983) at Hajji Firuz Tepe (see **section 8.4**).

In addition, Verhoeven creates sub-types, for example archives, grain stores and general storage. The category of general storage is broad enough to avoid criticism however the definition of archives (e.g. in Room 6, Building II (Verhoeven 1999: 132)) and grain stores is slightly more problematic. In the case of the former definition is made on the basis of the identification of sealings, seals and figurines. Verhoeven dismisses the notion that these archives are dumps for secondary refuse "considering the complete objects and the improbability of constructing rooms especially for dumping debris" (1999: 139). Implicit in the latter statement is the clear association of all artefactual material with the primary (habitation stage) function of the room; there is no allowance for a change in function. In the case of the grain stores, it is only in two cases that any botanical remains have been found, and in the majority of those rooms allocated as grain stores Verhoeven makes their definition primarily on the basis of room dimensions and characteristics. Furthermore, on at least one occasion he suggests that finds located in these rooms are "most likely intrusive" without having any evidence to support this statement (1999: 123).

To conclude this consideration of Verhoeven's study of the Burnt Village Level at Tell Sabi Abyad, it is fitting to explore and question some of the assumptions that are the foundation of his altogether structuralist interpretations. Principal among these are the material foundations that his interpretations are built on. For example, there are a number of problems (noted above) with his identification of *in situ* contexts and his passing consideration of site formation processes. Problems that not only cast doubt on his analyses and conclusions but also suggest contrary interpretations. At the core of Verhoeven's interpretations lie the functional (and symbolic) differentiation of tholoi and rectangular buildings. The large multiple roomed rectilinear structures are most numerous and most abundant at the site and so the bulk of his analyses centres on these. Burnt village Level 6 tholoi structures are far fewer and those that are attributed to dwelling function even less; this raises problems for interpretation. The allocation of dwelling function to certain tholoi is made on a number of grounds. First, Verhoeven refers to Breniquet's analysis of later Halafian architecture and her conclusions that the larger tholoi were houses (1999: 167, 169). Second, he argues that they were probably houses because they had the largest interior space in the settlement (Verhoeven 1999: 169). Third, the dwelling tholoi have hearths for eating and heating (although many ovens and fire pits are found in unroofed spaces outside structures). Fourth, the other rectangular spaces and tholoi are too small and there is no evidence of upper storeys. Finally, his first preliminary analysis of artefact inventories indicates that they are dwellings (Verhoeven 1999: 171). This important point is not clarified beyond his noting the absence of large storage jars (it should be noted that intact or reconstructible storage jars are also largely absent in the so-called storage rooms). From all these arguments it appears that Verhoeven's construction of tholoi function is ultimately based on rather limited data and, more significantly, on *a priori* assumptions rather than a detailed spatial analysis of artefactual distributions.

On a further note it is Verhoeven's contention, in the context of the Burnt Village Level 6, that these large multi-cellular rectilinear structures were single storey (1999: 27, 29). However, for the level 3A settlement the large rectilinear structure Building 1 is interpreted as a dwelling that probably had a second storey (1999: 187-98; see also Akkermans 1989a: 302-3). The tholoi being small and lacking hearths are deemed auxiliary in function. In other words there has been a change in architectural function and social practice. This change is conveniently explained by Verhoeven's borrowed concept of habitus that "not only allows participants to act, but also offers the possibilities for change within the limits it sets" (1999: 217). Nevertheless, despite his arguments it is by no means proven that Level 6 buildings lacked second storeys in every case. The existence of a second storey would create more acute problems for interpretation of room function than those caused by the passing recognition that the roof space of buildings were utilised for a number of activities. It eloquently illustrates the weakness inherent in two-dimensional reconstructions of artefactual deposition. Thus, one can question the spatial analytical evidence that Verhoeven founds his interpretation of village social relations upon.

In addition, Verhoeven's theoretical stance presupposes his interpretation of architecture in terms of oppositions between round versus rectangular. The significance that he attaches to the distinction between round and rectangular in turn is combined with certain architecturally driven assumptions based on the identification of excavated spaces (e.g. as indoors/outdoors) to mould the data to fit his interpretations. These identifications are made on the basis of functionalist conceptualisations of artefacts, space and of the action of site formation processes. Thus, although Verhoeven argues that his method combines both inductive and deductive reasoning, his approach is largely deductive.

Finally, Verhoeven's interpretive framework for village social relations adopts structured oppositions such as round versus rectangular, or nomads versus residents. But, were we to consider round and rectangular forms of architecture as complementary rather than as in opposition then the correlation of structural form to social or other division would not be necessary. In other words, while it may well be the case that round dwellings were 'houses' and multi-roomed rectilinear structures were for storage, it need not be the case that they were the property of, or utilised by, different sections of the society. Furthermore, is it necessary to make such divisions along socio-economic grounds, might it not be equally legitimate to consider, for example, gender based social relations and thereby equate round versus rectangular with female versus male (see, e.g. Wengrow 1998).

5.5 THE IMPORTANCE OF TELL SABI ABYAD TO THE PRESENT STUDY

Verhoeven's study represents a substantial undertaking and his awareness of site formation processes together with his concern to demonstrate the potential of spatial analyses to inform wider interpretations regarding the structure of society is commendable. Indeed, in the context of Near Eastern archaeological research it is arguably a pioneering piece of work. However, the critique above has revealed that there are fundamental flaws of both a theoretical and a methodological nature in his study. In particular, Verhoeven's study is predicated on assumptions about the function of artefacts (and space) and about the identification of archaeological categories of primary and secondary activity. His interpretations espouse more recent post-processual and structuralist theoretical frameworks but the data is uncritically gathered and manipulated in a more traditional functionalist way. Recognition of these flaws in approach provides justification for the inclusion of a number of the same features considered by Verhoeven in the following analysis. These, in turn, provide an opportunity to not only re-evaluate Verhoeven's interpretations but to create new interpretations in terms of artefactual deposition, site maintenance procedures, abandonment, curate behaviour and related social practices. To this end, emphasis will be placed on the patterning of similarities and differences in the content, composition and condition of assemblages from structures, open areas and a midden location. In particular, focus will be directed to the distinction between intentional and incidental human impacts on broadly contemporaneous depositional contexts.

Within the larger context of this study, the analysis of Tell Sabi Abyad invites comparisons to be made with similar archaeological situations involving the open settlements of early farming communities or the recovery of burnt structures that are highly productive of artefactual remains. Furthermore, as an example of an Late Neolithic village farming community it presents some material for wider discussion of archaeological approaches to the analysis of early prehistoric settlements and the interpretation of the socio-economic condition of their inhabitants.

Finally, as well as providing an opportunity to investigate maintenance and abandonment behaviours at the synchronic level, because of the depth of deposits and the extent of excavation at Sabi Abyad, there is an opportunity to compare and contrast artefactual deposition in more than one occupation level. Whereas there appears to be some continuity in Late Neolithic occupation from levels 8/7 to at least 5 (a span of time of some two hundred years in the second half of the 6^{th} millennium B.C.) in terms of material culture there are indications that settlement layout and use of space shifts. Therefore, there is potential for the diachronic analyses of shifting patterns of behaviour in terms of curation, expediency, discard, abandonment and post abandonment behaviour. As a result, Sabi Abyad offers a potential opportunity for patterning changes in artefactual deposition stratigraphically within the context of a society that sees well-documented material culture changes with the development of Halaf type cultural attributes, but which at site level offers no clear picture of other externally generated behavioural developments. It is feasible that changing patterns of human behaviour in terms of site maintenance and abandonment provide indications of social change just as do conventional artefact typologies.

5.6.1 Analytical considerations

The data archive from the site of Tell Sabi Abyad I consists of site records (e.g. field notes, plans and sections) and existing databases of stratigraphy and finds recovered up to the 1993 season of excavation. These earlier databases and records have been adapted for use in the present study and augmented with new data from more recent excavation seasons (1997-98). Data utilised in the present analysis is to be found in **Appendix 2**.

5.6.2 Contextual

From observations of the character of excavation and recording techniques employed at Sabi Abyad, a number of advantages and disadvantages can be discerned for the reconstruction of contexts of recovery and the contextual analysis of artefacts. A major problem concerns the allotting of loci numbers to areas such as room fills (a problem that is not confined to Sabi Abyad). This system conspires to amalgamate into one, contexts that might include many and varied phases or episodes of activity and deposition. This makes it difficult to really be sure of separating floor and related '*in situ*' deposits from some other room fills. In the case of the burnt structures some assemblages are sealed within burnt deposits. However, these burnt fills survive to more than 50cm in depth in many instances and, as will be argued below, there is good reason to believe that they comprise many episodes of deposition. The only assistance in trying to separate finds is through consideration of the height of their recovery in relation to the context where they are recovered and the floor or tops of the walls where these have been identified and recorded. However, not every find had its level recorded; in these instances, the day on which the find was recovered is used (wherever possible) to ascertain the lowest height available for the locus and lot from which the artefact was recovered. Nevertheless, it is possible for the large majority of the finds to get a fix on the horizontal and vertical spatial location to the nearest 5cm.

Having got a fix on spatial and vertical position it is then possible to lock this into the available contextual information. However, there are a host of problems related to this. Where there is clear architecture then the records provide solid or concrete contexts to contain the artefacts. In other words, artefacts might be seen to be above floors or within rooms defined clearly by walls. On the other hand, where there is an open space or midden deposition then attempts at reconstructing the original stratigraphy becomes more problematic as many contexts might have been dug under the umbrella of a single locus that may itself be defined by arbitrary boundaries. As a consequence, it becomes impossible to really get an artefact fixed to a clear 'episode' of deposition as related by a single lens of ashy matrix or some equivalent single episode context. But then the hope of ever getting such a resolution is possibly unrealistic even on the best-recorded sites (with the exception of recovery methods that involve microstratigraphical techniques). One approach involves the acceptance that, in many instances, artefactual deposition must be considered by phase and only in rare circumstance, where there is clear deposition on a floor or within one homogenous layer, that was picked up and excavated clearly can it be deemed that there has not been a mixture of contexts in the recovery of the finds. In the case of the latter example it should be noted that, where there is such a substantial deposition of a homogenous nature, it might be reasonable to assume that it is less likely that artefactual deposition is the product of human action.

The contexts analyses from the site may be categorised as follows:

Buildings/Rooms -	Buildings I, II, IX, XII and XIV from Level 6 and Buildings I and II from Level 5.
Open Areas	Open Areas 1 to 6 from Level 6
Midden Deposits -	Midden deposits from Square T12 spanning Levels 7 and 6.

Ahead of the analysis there follows below a section concerning the artefactual considerations that are applicable to all contexts.

5.6.3 ARTEFACTUAL

The principal artefactual considerations specific to the Sabi Abyad case study alone concern the broad functional categories of the artefactual assemblage. Certain artefact types and materials (e.g. clay sling missiles and tokens) are present that are unknown Tell Jerablus Tahtani (**Chapter 6**) and Kissonerga-Mylouthkia (**Chapter 7**) (see **Figures 4** and **5**). **Table 2** lists the broad functional categories utilised in the following analysis.

Additional variables relating to condition, curation and size are also considered. In the case of the first (condition), a distinction is made between artefacts that are complete, damaged (but still largely intact) and broken. With regard to curation, the basic two-fold distinction between curation and expediency (defined in **section 4.3.3**) is adhered to here. Thus, curated artefacts are those that saw significant modification or manufacture prior to their use and expedient artefacts are those that saw little or no effort in terms of modification. The former includes pottery vessels, spindle whorls, grinding stones, pestles, beads and figurines. The latter, includes clay sealings and tokens. The initial inclusion of sealings and tokens in the expedient category is justified by their material and ease of manufacture and supported by later interpretations. It is the seals themselves that are used to produce the impressions on clay sealings and the containers used to store the tokens that are the curated artefacts.

5.7.1 ANALYSIS

There follows a contextual and artefactual analysis of a series of building, open area and midden contexts from Levels 5, 6 and 7 at Tell Sabi Abyad. This affords comparisons within and – to a lesser extent - between occupation phases with the aim of discussing patterning at the both a synchronic and diachronic level. The bulk of analysed contexts are, however, from the Burnt Village Level 6. The analysis will be conducted chronologically with features considered from Level 7 first, followed by Burnt Village Level 6 and Level 5.

5.7.2 BURNT VILLAGE LEVEL 6

A range of contexts that have been broadly assigned to building level Upper 6 (Burnt Village) have been chosen for analysis (see below; **Figure 6).** These have been selected for comparative purposes. Included in this selection are some contexts previously considered by Verhoeven (1999). Supplementing material from Verhoeven's own study is a body of data from contexts that have been more recently excavated (Verhoeven only studies material excavated up to 1993) including structures, open areas and midden deposits. Consideration of a diversity of larger feature types is in keeping with earlier arguments for comparative contextual analyses (**sections 3.5** and **4.3.2**) (see Needham and Spence 1997).

BUILDING 6.I

Building 6.I is analysed by Verhoeven (1999: 118-126) as a storage building with activity areas, comprising a mix of multifunctional storage rooms and rooms that were used as multifunctional activity areas (see **Figure 6**). Rooms 2 and 12 contained ovens.

A total of 134 artefacts were recovered from Building 6.I (see **Appendix 2**). Analysis in terms of the presence/absence of the main artefact classes reveals that there is a broad range of represented in this assemblage; the notable absences are sealings, figurines and spindle whorls (**Table 3**). Unsurprisingly, a similar broad range of functional categories is also present, with heavy processing the most numerous (33.6%), followed by projectiles (21.5%%), textile production (17.2%), containing (13.4%) and other (8.2%) (**Figure 7; Table 4**). The categories of personal ornament (5%), storage/administration (1.5%) and cutting tools (0.7%) have low occurrences. The proportions of the materials clearly reflect the predominance of certain categories as the majority of finds are of stone (46.3%), followed by clay (26.9%), pottery (14.2%), bone (10.4%) and other (2.2%). Artefacts of bone (71.4%) and stone (62.9%) have the highest fragmentation rates followed by pottery (36.8%) (**Table 5**).

The bulk of this assemblage is either broken (44.8%) or damaged (14.9%). The category of heavy processing has the highest fragmentation rate (64.4%) followed by the categories of containing

(61.1%) and textile production (47.8%). The category of projectiles has the lowest rate of fragmentation (3.4%). Analysis of the Building I assemblage by longest dimension reveals that the majority of artefacts are between 5 to 10cm long (36.3%) followed by artefacts between 2 to 5cm (34.3%) and 10 to 20cm (20.6%) in length (**Figure 8; Table 54**). There is a limited occurrence of small artefacts of less than 2cm in length (5.9%) and of artefacts over 20cm long (2.9%).

Analysis using the twofold distinction between curated and expedient artefacts reveals that the former are in the majority (54.7%) (**Table 6**). However, there is a clear distinction between the two in terms of condition whereby little more than a quarter of curated artefacts were recovered complete whereas the majority of expedient artefacts were (60.3%).

The most productive of the rooms in this structure was room 3 that produced 26 finds. The majority of these were from the category of heavy processing (46.2%), followed by other (15.4%), containing (11.5%), personal ornament (7.7%), textile production (7.7%), projectiles (7.7%) and storage/administration (3.8%) (**Figure 9; Table 7**). Broken and/or damaged artefacts occurred in equal proportion to complete artefacts. The majority of artefacts are of stone (50%), followed by clay (15.5%); artefacts of pottery, bone and 'other' materials occur in equal proportions (**Table 8**).

BUILDING 6.II

Building II was excavated in 1991 and is largely situated in square Q13 but extends into Q12, R12 and R13 (**Figure 6**) (Verhoeven 1999: 128-141). The building consists of a multiroomed rectilinear structure. At least 17 rooms and 1 activity area have been assigned to Building II and these averaged 2m by 1.50m, with the southern rooms being squarer at 1.5 by 1.5metres.[2] Only one possible door was identified in the wall of one of these rooms. Floors tended to be sloping and consisted of compact layer of light brown loam with lime spots. This structure clearly suffered in the general conflagration and proved particularly prolific of recovered finds. Its walls were severely burnt and the rooms were filled with burnt red and black deposits creating problems for the excavator. Blocks of mud with burnt reeds adhering and charcoal orientations suggesting the presence of wooden poles (joists) implied the presence of roof collapse.

Past interpretations founded on excavator's observations in tandem with the sheer quantity of finds recovered from Building II have been in terms of the deliberate destruction of the building and the *in situ* deposition of material providing an opportunity to reconstruct the use of space during habitation. This reconstruction features large in Verhoeven's (1999) interpretations of the Burnt Level 6 phenomenon (see **section 5.4.1** and **5.4.2** above). The character of the structure and the nature of the small finds, particularly from one room (6.6), prompted the conclusion that the building was largely used for storage of food (rooms 11, 12 and 14), non-food products (rooms 2-5, 8-10, 13, 16 and 17) and for archives (rooms 1, 6 and 7). A few activity areas were identified also (e.g. 'open area' 15 and room 18, the former contained a number of ovens).

Building II produced a large number of registered finds, 556 in total, proving the most prolific of Burnt Village Level 6 structures. Consideration of the artefactual repertoire in terms of presence/absence of main artefact classes reveals a broad range indicative of a host of possible activities (including containing, food processing, personal ornament) (**Table 9**). When this assemblage is broken down into broad functional categories it is clear that all categories are abundantly represented with the highest proportion of the total associated with the category of storage/administrative (54%) followed by heavy processing (11.7%), textile production (10.4%), containing (8.1%), projectiles (4.5%), other (4.5%), ideology/ritual (3.4%), personal ornament (2.5%) and cutting tools (0.9%) (**Figure 10**; **Table 10**).

Analysis of artefacts by material reveals an overwhelming preponderance of clay (unbaked) artefacts (76.4%) the majority of which are from the category of storage/administration (**Table 11**). Stone artefacts represent the next largest category (16%). Far fewer pottery (3.8%), bone (3.6%) and shell (0.2%) artefacts were recovered.

Approximately two thirds of the finds were recovered in a fragmentary condition, less than a third are intact and the rest are damaged. The proportions of intact, fragmentary and damaged artefacts vary considerably when considered by broad functional category (**Table 10**). Of particular note are the high fragmentation rates for the categories of ideology/ritual (100% broken) and storage/administration (75%) and the relatively low fragmentation rate for the categories of projectiles (28% broken, 8% damaged) and personal ornament (42.9% broken). The fragmentation rate of artefacts in the category of storage/administration is misleading. The majority of finds in this category are sealings (or clay with seal impressions that were originally sealing vessels) in the absence of whole pots and given the fragility of such things it is unsurprising that all are fragmentary and it is quite probable that they represent considerably fewer whole 'artefacts'. The removal of such items from the equation reveals that the other main artefact class in this category - tokens - has a fragmentation rate that compares well with that of heavy processing (66.2% broken and/or damaged) or textile production (55.2% broken and/or damaged).

Analysis of artefacts by size reveals that the overwhelming majority of finds from Building II are less than 5cm in length (62.4%) (**Figure 11**; **Table 54**). This is in part a reflection of the large number of small artefact classes associated with the categories of storage/administration, personal ornament and textile production. It is also a telling reflection of the fragmentary nature of a substantial proportion of the recovered assemblage of registered finds from the building. It is notable that complete artefacts are – generally - significantly smaller than 5cm in length. Predictably, grinders and grinding slabs (i.e. artefacts belonging to the from the heavy processing category) are generally the largest recovered artefacts from Building II contexts however, as noted above, approximately two thirds of these are either broken or badly damaged.

Analysis using the twofold distinction between curated and expedient artefacts reveals that the latter comprise over two-thirds of the assemblage (70.8%) (**Table 12**). There is also a slight

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[2] The allocation of rooms to Building II is, however, under review (pers. com. O. Nieuwenhuyse).

difference between the two in terms of condition whereby little more than a quarter of expedient artefacts were recovered complete (26.9%) whereas over a third of curated artefacts were (34.6%). Clearly, it is again the case that these proportions are significantly influenced by the considerable number of artefacts from the category of storage/administration (particularly sealings and seal impressions).

ANALYSES BY ROOM

First, it is notable that analysis of the presence or absence of the main artefact classes by room indicates that all classes have been recovered from Room 6 (**Table 9**). Room 7 has produced a relative variety of finds in comparison to the next most productive rooms 10 and 13. The other rooms proved relatively unproductive and limited in the variety of classes they yielded, with rooms 2 and 11 producing no clear classes of registered artefacts.

Given the quantity of finds recovered from Room 6, analysis will be concentrated initially on this small area within Building 2.

ROOM 6

The walls of Room 6 survive to a maximum height of some 50cm and encompass an area of approximately $3m^2$; therefore, the volume of material excavated from this room did not exceed some $1.5m^3$ (**Figure 6**). Room 6 however produced the largest number of small finds (n=409) and sherds. Finds were recovered from heavily burnt deposits in such quantity that it has been previously assumed that many were unintentionally left as a result of the conflagration that raged across the settlement (see Verhoeven 1999).

Artefacts associated with the category of storage/administration are most numerous (62.6% of the total) followed by textile production (9.5%), containing (7.6%), heavy processing (5.9%), ideology/ritual (4.4%), projectiles (4.4%), personal ornament (2.6%) and other (2.4%) (**Figure 12**; **Table 13**). Consideration of the broad functional categories by condition suggests some interesting patterns. Those categories with the highest proportions of fragmentary and/or damaged artefacts are ideology/ritual (100% broken), storage/administration (70.8%), heavy processing (74.1%) and containing (71%).

Clay artefacts are most numerous (85.1%) followed by stone (8.6%), pottery (3.4%), bone (2.7%) and shell (0.2%). Analysis by material and condition supports broad patterns of analysis by broad functional category and condition by demonstrating the high fragmentation of clay artefacts from Room 6 (70.1% broken) (**Table 14**). Bone (63.6%) and stone (14.3% damaged and 48.5% broken) artefacts have a similar rate of fragmentation or damage. Pottery artefacts have the lowest fragmentation rate (28% broken) reflecting the predominance of small and durable items such as spindle whorls and perforated discs.

Analysis using the twofold distinction between curated and expedient artefacts reveals that the former constitute a large majority of the assemblage (83%) (**Table 15**). However, there is no distinction to be made between the two in terms of condition.

Further patterning emerges when consideration is given to the vertical distribution of finds from Room 6. **Figure 13** reveals the quantity and depth (maximum approximately 50cm) that separates the highest and lowest finds recovered from Room 6 by broad functional category. **Figure 14** shows the same finds by condition. In particular, the distribution reflects the marked slope of the floor from North to South. Investigation by broad functional category suggests with varying degrees of security a number of observations. First, the distribution of storage/administration artefacts reveals their occurrence through the depth of the room fill. As a result nearly 50cm separates the very highest from the very lowest artefact recovered. Regardless of the dramatic slope of the floor that is more than 25cm over a distance of 1.5metres it remains the case that a number of these finds are situated 30-40cm above the floor. The distribution of heavy processing finds also reveals their occurrence throughout the fill of Room 6. Again there is more than 40cm separating the highest such finds from the identified floor level. A number of such artefacts are found on or near the floor, as is consistent with other rooms in Building 2. However, the greatest concentration of these artefacts is in the central area of the room at 25cm or more above the floor level. The pattern of vertical distribution of artefacts from the category of textile production is similar to that of storage and administrative items. In other words they occur throughout the depth of the deposit from its upper limits to near the floor. However, as with the storage/administration category, it is possible to discern some patterning at the level of 321.65 m.a.s.l. and above. Finally, in the case of the category of ideology/ritual (all figurines) all finds recovered appear to be more than 20cm and often at least 30cm above the estimated floor level. The implications of this will be considered further below.

ROOM 7

Room 7 produced a smaller number of finds than room 6 (n=58) (**Figure 6**). Analysis of the presence/absence of the main artefact classes similarly reveals the more limited nature of the Room 7 assemblage in comparison to that of Room 6 (**Table 9**). Consideration of these artefacts by broad function category indicates that (**Figure 15; Table 16)** the majority are from the category of storage/administration (55.52%), the next category is that of 'other' (24.2%) (the result of number of clay lumps recovered, some of which might well have been sealings, sling missiles or figurines originally). The categories of containing (8.6%), heavy processing (6.9%), personal ornament (3.4%) and ideology/ritual (1.7%) have relatively low occurrences. Artefacts associated with textile production are absent. Further consideration of broad functional category and condition reveals a high rate of fragmentation (75.9% of artefacts are broken), higher than that for Room 6 and higher than the average for the total building assemblage (**Table 10; see also Table 13**). Even ruling out the impact of sealings on the proportion of fragmentary and damaged finds the fragmentation rate remains high.

Artefacts associated with the category of heavy processing and ideology/ritual (100% each) have the highest fragmentation rate followed by other (78.6%), storage/administration (78.1%), containing (60%) and personal ornament (50%). Given the aforementioned occurrence of artefacts associated with the categories of storage/administration it is unsurprising that the clear majority of finds from Room 7 are of clay (86.2%); over three-quarters of these are broken (**Table 17**).

Analysis using the twofold distinction between curated and expedient artefacts reveals a similar pattern to Room 6; thus, curated artefacts comprise the bulk of the assemblage (84.4%) (**Table 18**). There is also some distinction between the two in terms of condition whereby less than a fifth of expedient artefacts were recovered complete (18.4%) whereas over a quarter of curated artefacts were (28.6%). However, the proportions of broken artefacts (ignoring damaged finds) are very similar.

Unfortunately, a reconstruction of the vertical distribution of finds cannot be reasonably attempted given the manner of Room 7 excavation. The majority of finds from Room 7 (where it lay in square Q12) were sieved out of a deposit up to nearly 40cm in depth. As a result exact location (horizontal and vertical) is unknown. However, the excavator did note that the finds appeared to be located predominantly in grey loamy deposits *between* the floor and the thick heavily burnt deposits that are found over the rest of the square. This observation suggests that these finds were sealed by burnt deposits but also protected by deposits that had already built up around them. In other words there is a clear suggestion that the finds were deposited some lengthy period of time before the fire, a point that will be returned to later in discussion.

OTHER ROOMS

Following the lengthy analysis undertaken on Room 6 and that of Room 7 above, consideration of assemblages from the other rooms in Building II will prove inevitably shorter, given the comparatively limited occurrence and variety of finds. Given such a small assemblage, that numbers 25 finds over 9 rooms (there are 64 additional finds that not attributable to any one room), it is best to consider the broad trends revealed by this distribution.

Analysis of presence/absence, demonstrates the limited repertoire of finds recovered from each of these other rooms (**Table 9**). Nevertheless, consideration of these finds by broad functional category (**Figure 16; Table 19**) across the rooms reveal a similar range of finds recovered as in Room 6 and 7 (see also **Figure 17** showing occurrence from other contexts). Artefacts associated with heavy processing are the most numerous (40.4% of the total) followed by textile production (21.3%), containing (10.1%), projectiles (5.6%), cutting tools (3.4%), other (3.4%), personal ornament (1.1%) and ideology/ritual (1.1%). However, the majority of the other rooms only produced artefacts associated with heavy processing (as the largest category) and/or textile production. Only Room 1 produced storage/administration and containing equipment, only Room 9 produced a token (e.g. storage/administration) and there was a singular occurrence of a bead (e.g. personal ornament) from Room 13. Clearly, then, the proportions of categories in relation to each other differ markedly from the pattern established by the extraordinary deposition from Rooms 6 and – to a lesser extent - 7. Unlike Rooms 6 and 7, the majority of artefacts are of stone; however a significant number are of clay (**Table 20**).

In terms of condition, there is a relatively high proportion of fragmentary artefacts across the rooms (58.4% are broken). However, the rate of fragmentation is less than that in Room 6 and considerably less than that in Room 7. A slim majority of the finds are of an expedient kind; the bulk of both expedient and curated forms are either broken or damaged (**Table 21**).

Reconstruction of vertical distribution of finds in rooms would serve little purpose given the small numbers involved.

BUILDING (THOLOS) 6.IX

Building 6.IX is a small circular structure situated to the east of Building 6.II and southeast of Building 6.XII (**Figure 6**). Given its size, the relatively small number of artefacts recovered and the presence of a small bin, it has been suggested - by Verhoeven (1999: 172-4) - that it served as an auxiliary building, possibly for storage. This conclusion is based on the realisation of artefactual parallels with some of the stores identified elsewhere in the settlement (e.g. Building 6.I, Rooms 1, 6 and 7). Verhoeven does, however, also point to the occurrence of figurines and of a seal impression to suggest that Building IX is of a 'special character'.

A total of 57 artefacts can be definitively assigned to Building IX. Analysis by presence or absence of classes reveals a broad repertoire of artefacts of different functions, one that is less various than Buildings 6.II (above) and 6.XIV (below) but more so than Building 6.XII (below) (**Table 52**). Consideration by broad functional category reveals the range of functional classes with a particularly high proportion of heavy processing artefacts (29.8%) followed by artefacts associated with storage/administration (19.3%), ideology/ritual (14%), containing (10.6%), textile production (7%), projectiles (7%), other (7%), personal ornament (3.5%) and cutting tools (1.8%) (**Figure 18**; **Table 22**). The majority of artefacts were of stone (40.4%) closely followed by clay (36.8%). The rest were of pottery (14%), bone (7%) and other materials (1.8%) (**Table 23**).

Over two thirds of the total number of artefacts are either fragmentary (49.1%) or damaged (19.3%). Artefacts associated with ideology/ritual have the highest fragmentation rate (87.5%), followed by containing (83.3%), textile production (50%) and other (50%). The category of heavy processing has a relatively low proportion of broken artefacts (33.3%). All finds associated with personal ornament were recovered complete; though the sample is small, this pattern is in keeping with other contexts. In the case of ideology/ritual (all figurines), the high fragmentation rate is also consistent with patterns noted in other contexts at the site (e.g. Building 6.II, Room 6). Heavy processing equipment has a relatively low fragmentation rate slightly greater than that obtaining to Building XIV but considerably lower than that of Building 6.II. A majority of the recovered artefacts (62.3%) are less than 5cm in their largest dimension (**Figure 19; Table 6**).

Analysis using the twofold distinction between curated and expedient artefacts reveals that the former comprise exactly two-thirds of the assemblage (**Table 24**). There is little distinction between the two in terms of the proportion of complete artefacts, however the proportions of damaged and broken artefacts are quite different with a larger of number of expedient artefacts being recovered in a damaged condition. Investigation of artefactual deposition within Building IX by height confirms the significant depth of deposition between the lowest and the highest of the finds recovered (**Figures 20** and **21**). There is some variety to the patterning witnessed through the depth of deposits. For example, the occurrence of heavy processing artefacts throughout the depth is interesting, particularly given the possibility that they reflect two or three levels at c.321.75, c.322.35 and 322.6 m.a.s.l.. Artefacts associated with containing and ideology/ritual occur at 322.3 m.a.s.l. and above. Their absence below these heights suggests some temporal differences possibly between phases of rebuilding/use of this structure. Similarly, artefacts associated with textile production occur at 322.25 m.a.s.l. and above. Lastly, artefacts associated with the category of storage/administration occur at c. 322.6 m.a.s.l. and thus appear to relate to the final phase of this structure.

BUILDING 6.XII

In form Building 6.XII is similar to Buildings 6.I, 6.II and 6.XIV, however Building 6.XII does not appear to have suffered in the same conflagration nor was it so productive of small finds (**Figure 6**). This has led Verhoeven (1999: 159-61) to the conclusion that this building was abandoned some time prior to the firing episode. In other words, Building 6.XII may have existed as an abandoned structure in the middle of a living settlement and as a neighbour to the occupied Building 2.

A total of 29 artefacts can be definitively assigned to the Building 6.XII. Analysis of artefact distribution by presence/absence indicates that, whereas Buildings 6.II and 6.XIV produced almost the entire range of the main artefact types, Building 6.XII produced less variety (**Table 25;** see also **Table 52**). Furthermore, whereas in the case of the other burnt structures certain rooms produced remarkably varied inventories, the most productive room (Room 3) in Building 6.XII produced just three of the chief categories considered here, namely: heavy processing, textile production and containing.

Analysis by broad functional category reveals that the category of heavy processing makes up the largest proportion of the total assemblage (34.5%), followed by containing (24.1%), personal ornament (13.7%), other (13.7%), ideology/ritual (6.8%), storage/administration (3.4%) and textile production (3.4%) (**Figure 22**; **Table 26**). In the case of the latter, there is a notable lack of perforated discs that are common to a number of the other contexts at the site. Considered as a whole in terms of general condition, once more it is clearly the case that the majority of recovered artefacts were broken (65.5%). The categories of other and textile production demonstrate the highest fragmentation rates (100% each) followed by heavy processing (60%) and ideology/ritual (50%). Personal ornament has the lowest rate of fragmentation (25%). The majority of artefacts are of stone (75%), followed by bone (10.3%), pottery (6.9%) and clay (6.9%) (**Table 27**).

Analysis of artefacts by their longest dimension reveals that the majority are between 5-10cm (30.4%) and 10-20cm (34.8%) (**Figure 23; Table 54**). No artefacts larger than 20cm were recovered from this structure. Further analysis using the twofold distinction between curated and expedient artefacts reveals that the former comprise the bulk of the assemblage (80%) (**Table 28**). There is also a clear distinction between the two in terms of condition whereby only a quarter of curated artefacts were recovered complete whereas the majority of expedient artefacts were (80%).

BUILDING 6.XIV

Excavated during the 1997 season, Building 6.XIV, like Building 6.II is a rectilinear multiroomed structure that underwent heavy burning (**Figure 6**). Only the northern rooms in T14 and western rooms in S14 survived intact (a total of 5) with walls standing up to c. 70cm at their highest. The other rooms that were identified to the south and east were partially truncated by the modern tell surface.

A total of 94 artefacts can be definitively assigned to the Building XIV. These were predominantly recovered from Room 2 (n=81). Analysis of artefact distribution by presence/absence indicates that although Building XIV produced almost the entire range of the categories, this variety is largely provenanced to Room 2 (**Table 29;** see also **Table 52**). Other rooms produced no more than 4 different classes, and Room 5 only produced 1 artefact from the category of containing (a stone vessel fragment). Analysis by broad functional category reveals rather different patterns to that seen in Building II (**Figure 24**; **Table 30**). Artefacts associated with the category of heavy processing make up the largest proportion of the total assemblage (25.4%), followed by containing (18.1%), other (17%), textile production (12.8%), ideology/ritual (10.8%), storage/administration (7.4%), personal ornament (7.4%) and projectiles (1.1%).

Artefacts of stone are most common (39.4%), followed by clay (34%) and pottery (15.5%) (**Table 31**). In the case of first, fragmentation rates (48.6% broken) reflect those of the largest category namely heavy processing. However, in the case of clay and pottery small finds, fragmentation rates are much higher and are concentrated to no one category.

Considered as a whole in terms of general condition, 60.6% of artefacts recovered were broken and a further 8.5% were damaged. Those categories with the highest proportions of fragmentary and/or damaged artefacts are ideology/ritual (100%), other (89.4%) and containing (84.2%) (**Table 30**). Those categories with the lowest proportions of fragmentary and damaged artefacts are textile production (18.6%), storage/administration (42.9%) and personal ornament (42.9%). Heavy processing equipment has an equal proportion of complete to broken artefacts. This is particularly significant in relation to the operation of curation behaviour at the time of and after the abandonment of these contexts and will be considered further below.

Analysis of artefacts by the largest dimension reveals that the majority of finds are between 5 to 10cm and 2 to 5cm (**Figure 25; Table 54**). A significant proportion of the assemblage comprises artefacts of less than 2cm in length. Further, analysis using the twofold distinction between curated and expedient artefacts reveals that the former comprise exactly two thirds of the assemblage (**Table 32**). There is also a clear distinction to be seen between the two in terms of condition; thus, little more than a quarter of curated artefacts were recovered complete whereas the majority of expedient artefacts were (55.6%).

Of all the rooms identified in Building XIV, Room 2 proved the most productive, yielding 72 finds. The majority of these are associated with the category of heavy processing (25%) followed by other (23.6%), containing (15.3%), ideology/ritual (13.8%), personal ornament (9.7%), storage/administration (8.3%) and textile production (4.2%) (**Figure 26**; **Table 33**). In terms of material, clay artefacts were most numerous followed by stone, pottery and other (**Table 34**). Two-thirds of the recovered finds were broken or damaged with the highest fragmentation rate (100%) occurring amongst artefacts belonging to the category of ideology/ritual. The lowest fragmentation rates belong to the categories of textile production (100% complete) and personal ornament (57.1% complete, the rest damaged). A significant majority of finds were of curated form (58.8%), the majority of these (almost two-thirds) were broken, whereas the majority of expedient artefacts were complete (54.5%) (**Table 35**).

LEVEL 6, OPEN AREAS 1 TO 6

To date, a number of open areas have been assigned to the Burnt Village Level 6 phase of occupation, of these only areas 1 to 6 are considered for analysis here (**Figure 6**). An 'open area' is defined as an unroofed space within the settlement area that lies between and around structures. As might be expected, such areas were used as route ways through the settlement and were probably the focus for numerous out-door activities. As such they were subject to manifest and disparate site formation processes (natural and cultural). In addition, there are inherent (and in part related) difficulties involved in their excavation and the recognition of external surfaces that, being unroofed, are also particularly susceptible to the operation of natural formation processes (see **section 2.4**).

Many of the open areas within the Level 6 settlement are not enclosed on all sides; consequently, their identification and spatial definition is often hazy and can involve arbitrary decision-making during excavation and recording. As a result of their intrinsically ill defined and/or poorly understood nature there are difficulties in analysing such spaces. Consequently, though they represent exterior space, in the absence of architecture, fixtures (e.g. ovens) or easily identified clean surfaces (or floor equivalents) they are rather understudied. Within his own studies Verhoeven gives open areas little attention (see 1999: 174-6), this is largely as a result of the considerable difficulties that are attached to the study of formation processes and deposits that occur in open, trampled areas. In a heavily built environment, such as that found at Sabi Abyad, attention was directed towards the identification of architectural features (e.g. walls, ovens, hearths, benches and so). In particular, roofed spaces defined by four walls and a floor or floors (or a continuous circular wall) were naturally targeted, as these are finally the most readily defined spaces for excavation, data collection and interpretation. Furthermore, in areas that lack such definition, perhaps because they are not bounded in their entirety or lacking a definite floor but are instead made up of many patchy ephemeral trampled surfaces, recording and retrieval is less consistent particularly in relation to the allocation of deposits and finds to phases of activity.

A total of 89 artefacts can be definitively assigned to these open areas. Analysis of artefacts by presence or absence for the six Open Areas reveals a broad repertoire of artefacts of different classes (**Table 36**). However, consideration of presence/ absence by individual open area reveals that Open Area 6 is the most varied assemblage followed by Open Area 5 (**Table 37**). The other open areas have five or fewer belonging to the main artefact classes (Open Area 1 has proved least productive).

Analysis of the total assemblage recovered from all open areas by broad functional category reveals the range of functional classes. Heavy processing finds (25.8%) constitute the largest category, followed by artefacts associated with containing (19.2%) (stone vessel fragments in particular) (**Figure 27**; **Table 38**). The categories of textile production (18%), personal ornament (11.2%) and other are the next most common. The categories of projectiles (6.7%), storage/administration (5.6%), ideology/ritual (4.5%) and cutting tools (1.1%) make up the smallest proportion of the assemblage in descending order. The majority of artefacts are of stone (50%), followed by clay (22.9%), pottery (14.6%), bone (10.4%) and other materials (2.1%) (**Table 39**). This is unsurprising given the predominance of artefacts associated with heavy processing and the significant occurrence of stone vessel fragments.

The bulk of the assemblage from Open Areas 1-6 was recovered in a fragmentary (58.4%) or damaged (10.1%) condition. The broad functional categories of ideology/ritual and heavy processing reveal the most notable patterns in terms of artefact condition (**Table 38**). In the case of former, the high fragmentation rate (100%) is in keeping with patterns noted in other contexts at the site (e.g. Room 6, Building II). The latter category also has a high proportion of fragmentary artefacts (73.8%), greater than that any other assemblage analysed from the site with the telling exception of the T12 midden deposits discussed below. Though the sample is small, the completeness of the personal ornaments (70%) is again in keeping with other contexts.

When consideration is given to the size of artefacts from these open areas, the clear majority of finds are between 2 to 5cm in their longest dimension, followed by those of between 10 to 20cm and those between 5 to 10cm (**Figure 28; Table 54**). As a group, the open areas – when compared to the other analysed contexts - produced the largest percentage of artefacts over 20cm in length and one of the smallest number of artefacts of less than 2cm in size (**Table 40**). The majority of finds from Open Areas 1-6 are of curated form (56.5%) and exactly two-thirds of theses are fragmentary. In contrast, half of all expedient finds are complete and only one third are broken (the rest are damaged).

MIDDEN DEPOSITS FROM T12 SOUNDING

Square T12 produced material of both Late Bronze Age and Late Neolithic occupation (**Figure 6**). The former consists of pits and an eroded built feature over the north western half of the trench that are not analysed here. The contexts considered in this study are those that date to the latter period. The majority of the material recovered came from a narrow 9m by 2m sounding along the southern baulk of the trench. In this sounding a complex stratigraphy was encountered that belongs to two occupation levels, namely: Burnt Village Level 6 and the preceding Level 7.

In the west of the sounding, a structure of Level 7 date projected more or less perpendicularly from the section (the same structure continued into T13 next door to the south) from just below the modern Tell surface. To the east of this wall (see section) we see a series of sloping layers which abutted the wall creating a number of possible deposits and surfaces that might be considered broadly contemporary with the occupation and initial stages of abandonment of this building (and of Level 7). The lowest of these rested above the ancient land surface of Level 7.

These layers are truncated further to the east and overlaid by more steeply sloping deposits that represent multiple lenses of ash and silt deposits that are clearly visible in section. These form tip lines that are representative of multiple dumping episodes over a considerable period of time. This systematic and prolonged dumping spans levels 6 and 7. Looking at the slope of these deposits there is a clear flattening out towards the higher levels and the appearance of a possible surface and midden deposits that can be associated with Level 6 architecture on the other side of the baulk in Square T13. Thus evidence of dumping precedes the building of Burnt Village Level 6 structures on the other side of the baulk and continues during their use.

As a result of the number of deposits and artefacts recovered from the upper and particularly eastern part of the sounding they must be considered broadly as 6/7 in the following analysis. Few artefacts can be assigned directly to Burnt Level 6 with any certainty but a majority can be assigned clearly to Level 7 given the existence of a structure in the south west of the trench and firm evidence that in this area Level 6 has been completely lost to erosion.

Regardless of the problems of capturing single episodes, the nature of the deposits in the T12 sounding provide an opportunity to analyse material that was intentionally deposited during the occupation of Burnt Village Level 6 and Level 7. The slope of the Tell at this point and the absence of architecture suggest that this was the edge of the ancient Tell during these Late Neolithic phases of occupation at the site. That these deposits provide evidence of middening that spans two discrete architectural levels on the site suggests a continuity of site maintenance activity. This scenario conforms to Needham and Spence's (1997) definition of a midden as an area of deliberate episodic dumping, distinct from a general area of inadvertent accumulation or a unitary dump to make up land levels for building and/or other purposes (see **section 4.3.2**). Potentially, investigation of the form, condition and material of recovered finds would provide good contrasting and comparative data to set against other spaces at the site (e.g. open areas and buildings). In particular, it affords an insight into the maintenance procedures pursued by inhabitants and sheds some light on efforts to differentiate between *intentional* and *incidental* acts of deposition within other contexts at the site (c.f. Needham and Spence 1997; see **section 3.4**). In qualification of the latter point however, it should be stressed that the resolution of individual acts of deposition are not considered a realistic aim, instead broader trends are sought. Nevertheless, given the apparent occurrence of large scale and deliberate dumping, it would be useful to consider what ramifications such a scenario has for the reconstruction of site maintenance procedures (e.g. Binford's distinction between *preventive* and *post hoc* maintenance (1983: 189)) and the definition of *in situ* material in other contexts at the site.

In the following section analysis of artefactual material recovered from this sounding in the form of registered artefacts is presented.

ANALYSIS OF T12 SOUNDING

A total of 154 artefacts were recovered from the sounding made in the Late Neolithic midden deposits of Square T12. Consideration by presence/absence reveals that the T12 midden deposits produced a broad inventory (**Table 52**). The largest category is that of storage/administration (30.9%) followed by textile production (20.1%) and containing (14.1%) (**Figure 29; Table 41**). The categories of heavy processing, other and personal ornament are less well represented. There are but few occurrences of artefacts associated with the categories of projectiles, cutting tools and ideology/ritual (1.4%).

Artefacts of clay are particularly well represented (46.3%) followed by stone (24.8%), pottery (15.4%) and bone (10.1%) (**Table 42**). This is consistent with the patterning of broad functional category (e.g. occurrence of storage/administration). Stone artefacts demonstrate the highest fragmentation at a ratio of nearly over 3:1. Bone artefacts (awls) were all recovered intact. Of interest is the almost 1:1 ratio of complete against damaged and fragmentary clay artefacts in favour of the former. Clearly, whereas one might expect that the more durable the material then the more likely it is to have survived intact it is in fact the case that the artefacts of more durable materials appear to have been subject to the highest degree of fragmentation and damage prior to their final discard in the midden deposits of T12. Explanations for this must be sought in other factors such as those relating to the nature of the artefact's function, size and their curate value.

Nevertheless, the majority of finds are either fragmentary (44.3%) or damaged (9.4%). In addition, 7.7% of artefacts show obvious signs of reuse prior to final deposition, 9.6% of artefacts have been burnt and 15.4% of artefacts show evidence of secondary burning after breakage or damage and prior to their deposition. Such evidence points to the complex life history that such artefacts have undergone prior to their final deposition. Indeed, evidence of recycling and of secondary burning after breaking suggest that a number of artefacts might constitute not only secondary refuse, they might have been deposited and recycled many times; they might also have passed through a stage as provisional deposition.

Heavy processing equipment has a particularly high fragmentation rate (88.2%). For other categories the fragmentation rate is significantly lower (e.g. textile production (13.4%) and storage/administration (23.9%)). Most significantly, over 70% of tokens were recovered intact. These represent the largest class of artefacts recovered from the sounding in T12. With such a high proportion of complete artefacts, in combination with their relative abundance, the inclusion of tokens in overall assemblage counts has inevitably skewed the overall figure for ratio between fragmentary and complete artefacts.

Further patterns are discernible in analyses of artefacts by their longest dimension. Most significantly, the vast majority of artefacts are less than 5cm in length with over two fifths of artefacts being less than 2cm in length (**Figure 30; Table 54**). Tokens, sealings and labrets are the smallest of the artefacts recovered from the sounding; grinders and grinding slabs, that constitute the majority of stone finds, are the largest. However, they are invariably heavily worn, often reused and essentially defunct on their deposition. They are also generally of smaller size than those from the other contexts analysed at the site. No other context has produced such an overwhelming predominance of small artefacts. The potential significance of this pattern is considered further in the discussion at the end of this chapter (**section 5.8**).

Analysis using the twofold distinction between curated and expedient artefacts reveals that the latter are in the majority (56.4%) (**Table 43**). Furthermore, there is also a clear distinction between the two in terms of condition as nearly two-thirds of expedient finds were recovered complete (64.6%) compared to less than a quarter of the curated artefacts (24.6%). A larger proportion of expedient finds were recovered damaged.

The artefacts that were recovered from the T12 midden deposits occurred throughout their depth (**Figures 31** and **32**). When plotted by height there are few discernible patterns in terms of the occurrence of artefacts broad functional category or condition. A possible exception to this rule is the concentration of artefacts associated with the category of storage and administration at c192.5m east and c. 320.75 m.a.s.l..

5.7.3 Level 5 Contexts

The architectural extent of the Level 5 settlement is far less than that of the Burnt Village Level 6 that precedes it (**Figure 33**). In consequence, there is not the same opportunity to provide a comparative analysis of different contexts of deposition and their assemblages at a broadly synchronous level. Given this paucity of discrete contexts for study, analysis will be confined to two multiroomed rectilinear structures. In doing so, the intention is to provide structures of a clearly different date for comparison with the Burnt Village Level 6 features considered above.

Building 5.I

Building 5.I is a substantial multiroomed rectilinear structure (**Figure 32**). In form this structure bears some comparison to Burnt Village Level 6 structures analysed in the preceding section. However, it is less clearly laid out and lacks the almost gridiron appearance of some of the earlier rectilinear structures (see, e.g. Building II).

A total of 48 artefacts from 16 rooms have been directly provenanced to Building 1, a figure that parallels the number recovered from Building 6.XII but is dwarfed by the number recovered from Building 6.II. Analysis of artefacts by presence/absence reveals a more limited repertoire than found in the majority of contexts considered from the Burnt Village Level 6 phase (**Table 44;** see also **Table 52**). In particular there is an absence of sealings and figurines. This contrast is more marked when considered by room where the most varied repertoire was recovered from rooms 14 and 16 (four identifiable classes each). The general pattern of occurrence is only 1 or 2 different classes per room. Clearly, the most commonly occurring artefacts are those associated with heavy processing activities.

Consideration by broad functional category reveals some interesting patterns (**Figure 34**; **Table 45**). Most notable is the particularly high proportion of artefacts from the categories of heavy processing (33.3%) and textile production (18.8%). Artefacts from the other broad functional categories have a limited occurrence. For example, there are few artefacts from the category of storage/administration (6.2%); this is in keeping with assemblages from some of the other buildings considered above (e.g. Building 6.XII), but in contrast with that of Building 6.II. Personal ornaments also have a limited occurrence (14.6%), a situation that is seen in other contexts at the site. The category of ideology/ritual activity is not represented. Stone artefacts are most numerous (58.3%) followed by artefacts of clay and bone (14.6% each) (**Table 46**). The highest fragmentation rates are for bone (71.4% broken) and stone artefacts (64.3%). The lowest fragmentation rate is for artefacts of clay (14.3% broken).

The majority of artefacts were recovered either in a fragmentary (54.2%) or damaged (14.6%) condition. The two most abundant categories (heavy processing and textile production) have the highest fragmentation rates (**Figure 34**; **Table 45**). In contrast, the categories of storage/administration (66.7% complete) and that of personal ornament (71.4%) are noteworthy for the relative completeness of finds. This may be considered a product of the means of deposition, size and/or material as in relation to the latter category. Further, consideration of artefact condition by material of manufacture reveals that the majority of clay artefacts are complete (**Table 46**). However, in the case of the other main categories the majority of finds are fragmentary or damaged. In the case of stone it is clear that the fragmentation rate is unusually high, a pattern that is repeated at other contexts at the site and one that is unsurprising, given the occurrence of heavy processing equipment in Building 5.I.

The high occurrence of stone artefacts associated with heavy processing activity correlates with the pattern of artefact occurrence by size (**Figure 35; Table 54**). A majority of artefacts are between 5 to 10 (39.4%) and 10 to 20cm (15%); however, there is a relatively high occurrence of larger artefacts (6%). The distribution shows a strong peak at between 5cm and 10cm that is in contrast with distributions shown by Burnt Village Level 6 buildings II, IX and 6.XIV and Open Areas 1-6 and also T12 midden deposits. Parallels may be seen in the distribution shown by the earlier Building 6.XII, however this will be discussed further below.

Analysis using the twofold distinction between curated and expedient artefacts reveals that the former comprise nearly two-thirds of the assemblage (65.2%) (**Table 47**). There is also some distinction between the two in terms of condition whereby exactly a quarter of the curated artefacts were recovered complete whereas over a third of expedient artefacts were (37.5%). A slightly greater proportion of expedient artefacts were also recovered in a damaged condition.

BUILDING 5.II

Building 5.II is, like 5.I, a multiroomed rectilinear structure (**Figure 33**). Only 25 artefacts were recovered from the structure as a whole, a smaller number still were assigned to specific rooms (n=16).

Analysis by presence/absence shows that classes common to other buildings are absent in Building 5.II (including tokens, sealings, figurines and sling missiles) (**Table 48;** see also **Table 52**). The most numerously represented categories are textile production (28%) and other (24%), followed by equal occurrences of personal ornament (16%), heavy processing (16%) and containing (16%) (**Figure 36; Table 49**). The categories of ideology/ritual and storage/administration are not represented. In terms of material, pottery artefacts are most numerous followed by stone and clay (**Table 50**). The highest fragmentation rates are for artefacts of stone and bone.

The bulk of this assemblage was in a fragmentary condition (72%) (**Figure 36; Table 49**). The categories of heavy processing and containing have the highest fragmentation rates (at 100% each), followed by the categories of other (83.3%) and personal ornament (50%); the category of textile production (42.9%) has a relatively low fragmentation rate.

Analysis of this small assemblage of artefacts by longest measured dimension reveals that the majority of finds are between 5-10cm (33.3%) and 10-20cm (28.6%) (**Figure 37; Table 54**). No artefacts greater than 20cm were recovered. Further, analysis using the twofold distinction between curated and expedient artefacts reveals that the former comprise over two-thirds of the assemblage (68.2%) (**Table 51**). There is a clear distinction between the two in terms of condition whereby little more than a quarter of expedient artefacts were recovered complete whereas the majority of curated artefacts were (60.3%).

5.7.4 COMPARISONS: PATTERNING SIMILARITIES AND DIFFERENCES BETWEEN CONTEXTS

There are considerable similarities and differences to be noted in the patterning of artefact deposition at Tell Sabi Abyad. These exist between rooms within the same structures, between different structures and between structures and other contexts (e.g. open areas and midden deposits) (see, e.g. **Tables 6** and **22**). Aside from qualitative similarities and differences that are considered below, there are significant quantitative differences in terms of the simple counts of small finds across contexts. Most notable is the richness of certain contexts (e.g. Building 6.II or the T12 midden deposits and the paucity of finds from other contexts (e.g. Buildings 5.I, 5.II and 6.XII). These variations find some support in the pattern of sherd counts; thus, the richest of the contexts in terms of small finds commonly produce the greatest number of sherds (**Table 53**). There is not a straightforward correlation however, as some of those structures that are most depleted of small finds (e.g. Building 5.1) still produced high sherd counts.

Significant qualitative similarities and differences are outlined below in four sections that summarise and compare results between assemblages in terms of broad functional categories, condition, size and curation.

Broad Functional Categories

A comparison of small find assemblages from the contexts analysed above reveals a number of similarities and differences in terms of the occurrence of the various broad functional categories (see, e.g. **Table 52**). In this section, these patterns will first be made by level and then at greater length across the levels. Reversing the order of analyses, Level 5 will be considered first by virtue of the more limited range of contexts and size of the assemblages considered.

The limited number of contexts analysed from Level 5 afford little in the way of comparison. Both structures 5.I and 5.II bear many similarities in terms of their assemblage compositions (see **Figures 34** and **36; Tables 45** and **49**). Thus, both assemblages are rather limited in size and – to a certain extent - variety (although there is greater variety in the assemblage from 5.I than that from 5.II). The category of personal ornament constitutes a relatively large proportion of each assemblage and the category of ideology/ritual is absent from both. Building 5.I produced a larger number of artefacts from the category of heavy processing and fewer from the miscellaneous other category. This structure also produced some finds from the category of storage/administration.

The contexts from Level 6 provide more data for comparison within the level, particularly given the considerable variations in the occurrence of certain categories across the various contexts analysed above. Of all the structures analysed, Building 6.II presents the most extraordinary wealth and variety of small finds, the bulk of which were recovered from one room (Room 6) (see **Figures 10** and **12; Table 10** and **13**). This assemblage is particularly unusual for the sheer quantity of artefacts associated with the category of storage/administration (especially fragmentary sealings), however all categories are represented. Those artefacts associated with the category of storage/administration (especially clay tokens) have a relatively wide occurrence, featuring both in other structures (e.g. 6.I, 6.IX, 6.XII, 6.XIV) and in the T12 midden deposits. Artefacts associated with personal ornament also occur in every one of the feature assemblages; however, they have their greatest proportional occurrence in the assemblages from Building 6.XII and those from Open Areas 1-6. Artefacts associated with the category of heavy processing again occur widely, representing the largest single category in the assemblages from 6.I, 6.II ('other rooms'), 6.IX, 6.XII, 6.XIV and Open Area 1-6. The assemblages from Rooms 6 and 7 in Building 6.II and that from the T12 midden deposits are the exceptions to this patterning. Of the other categories, textile production and ideology/ritual are worthy of note. In the case of the former, this category generally comprises between 10 and 20% of most assemblage totals, however in certain features such as Buildings 6.IX and 6.XII and Open Areas 1-6 they have a significantly smaller occurrence. In the case of the latter, it is interesting that this category is particularly well represented in burnt structures 6.II (especially Room 6 and 7) and 6.XIV (especially Room 2).

Using the Robinson coefficient to measure degree of similarity between the contexts from Levels 5 and 6, a number of patterns are discernible that are best summarised following the sequence presented in the preceding analyses (**Table 55**).

Comparison between Building 6.I and the other contexts indicates that there is a greatest similarity with the assemblages from Building 5.I, followed by that from Open Areas 1 to 6. The greatest dissimilarity is with Buildings 6.II and 5.II and the T12 midden deposits.

Building 6.II reveals the greatest similarity with the T12 midden deposits when considered as a whole. The assemblage shows little similarity with that from any other context and the most dissimilarity with the open area contexts and Buildings 5.II, 6.I and 6.XIV. However, when the rich rooms 6 and 7 are removed from the equation the assemblage from the rest of the rooms shows strongest similarity with the assemblages recovered from Buildings 5.I, 5.II and 6.XII.

Building 6.XII shows greatest similarity with the assemblage analysed from the open areas and that from Building 6.XIV. The assemblage shows greatest dissimilarity with those from Building 6.II and the T12 midden deposits.

Building 6.XIV reveals a strong similarity with the open area assemblage and Buildings 6.IX and 6.XII. This assemblage is markedly dissimilar from those recovered from the T12 midden deposits and Building 6.II.

Tholoi 6.IX shows the greatest similarity with the assemblages from Buildings 6.I, 6.XIV and the open areas. The greatest dissimilarity is with the assemblage from Building 5.II.

The T12 midden deposits evince no marked dissimilarity to any of the other analysed assemblages. However, they do show the greatest similarity with the assemblage recovered from Building 6.II, particularly Room 6.

With the exception of Building 6.II, building 5.I reveals some degree of similarity with all the other contexts considered, particularly Building 6.XIV and the assemblage from Open Areas 1-6.

Building 5.II shows little degree of similarity with the other contexts. The strongest similarity is with Building 5.I and the greatest dissimilarity is with the assemblages from Building 6.II, followed by 6.I and 6.IX.

Condition

It is generally the case that there exists a ratio of at least 3:1 of fragmentary and damaged artefacts to complete and apparently still serviceable artefacts regardless of the context considered (see **Figure 38** and **39**). There is no reason to believe that this ratio is solely the product of post-depositional events; rather it probably reflects patterns established at deposition, whether during the final habitation, abandonment and post-abandonment stages of activity at the site. This pattern amongst the small finds is also mirrored by the high fragmentation rate noted for pottery from some of the richest contexts; sherdage that has defied efforts at reconstruction, suggesting that the majority of vessels were broken at deposition (e.g. Verhoeven 1999).

Consideration of fragmentation in conjunction with functional category demonstrates some general patterning across the site during Burnt Village Level 6 and Level 5 occupations. For example, artefacts associated with the category of heavy processing occur in nearly every context; they are generally ubiquitous. In addition, where they do occur they are predominantly fragmentary and demonstrate heavy wear (and - on occasion - reuse in another function). Within structures, it is common for artefacts from the category of heavy processing to turn up on or just above the floors as well as higher up in the fills of rooms; this is the case for burnt and unburnt structures of Level 6 as well as those for Level 5. However, in the T12 midden deposits (see above) it is surprising that they do not occur in larger numbers. They also appear to be generally smaller (see below), implying that they are highly fragmentary and therefore that they really have no further perceived use. Concomitant with this conclusion is the realisation that though such artefacts are fragmentary in other settlement contexts they were not always finally discarded in the midden perhaps because they might still have had some perceived use or other significance. Ultimately, however, their value was not great enough to prevent their being finally left behind when structures were eventually abandoned.

It is similarly common for artefacts associated with the category of textile production to turn up both on the floors and in the fills of rooms, as well as in other contexts (e.g. Open Areas and the midden). However, these are less frequently fragmentary. This pattern of occurrence is perhaps, in part a reflection both of their size and the durability of their material of manufacture (in the case of pottery spindle whorls and perforated discs). Equally important might be the fact that certain of these finds are expedient in form (e.g. awls) and/or manufactured from readily available raw materials (e.g. animal bone or re-used pottery sherds). In terms of their size (see below) and – in many cases – their durability, they have something in common with those artefacts that are associated with personal ornament; although, the latter's wide pattern of occurrence also suggests that their deposition was probably accidental.

The category of ideology/religion, represented by human and animal figurines of clay, consistently reveals the highest fragmentation rates across the contexts. The use of non-durable material could be a factor in their state of preservation, however the common occurrence of headless figures, as well as the relatively low rate of fragmentation amongst other finds of similar materials (e.g. tokens), points to a an intentionally produced pattern of condition (see discussion below).

Size

A consideration of artefact size across all the contexts analysed above, reveals that there is a clear predominance of small sized artefacts (less than 2cm) (**Table 54**). Such a pattern suggests – unsurprisingly - that there is some correlation between the size and the condition of an artefact on recovery, however such a correlation is not straightforward as other variables such as material, manufacture, form and function will all have an impact on the condition of an artefact.

Nevertheless, comparison of occurrence of artefacts by size shows that there are distinct similarities between some contexts and clear differences between others. For example, comparison between Building 6.II and Tholoi 6.IX reveals a close correlation in the occurrence of artefacts by their size. In turn, the evident predominance of artefacts of less than 5cm in length in these features is matched in varying degrees by the artefact assemblages recovered from Open Areas 1-6 and from the T12 midden deposits. In the case of the former, a difference can be noted in the greater occurrence of larger artefacts. In the case of the latter, there is an even more marked proportion of artefacts of less than 5cm, many of which are less than 2cm in length. This predominance of small artefacts most closely resembles that seen in Building 6.II. Such patterning is potentially suggestive of the efficiency of site maintenance procedures operating during the habitation phase of the settlement. In other words, the maintenance of habitation areas within the built environment of the settlement regularly involved the collection of smaller artefacts and their deposition in the midden deposits of T12.

The assemblages recovered from Buildings 6.XII, 5.I and 5.II are markedly different from those of the aforementioned contexts. With the former there is a clear predominance of artefacts over 5cm and the largest proportion of the assemblage are over 10cm in length. Building 5.I similarly shows a larger proportion of artefacts over 5cm but unlike Building 6.XII these are under 10cm. Few smaller artefacts were recovered from these structures; the majority of which generally belong to the category of personal ornament or textile production. The occurrence and survival of the former might be explained in terms of chance, perhaps through accidental loss, their being overlooked by departing inhabitants or later opportunists, or through their being readily trodden into the matrix of floors. The latter might owe their occurrence to their size, durability and relative ease of replacement.

Curation and expediency

Patterning across the various assemblages in terms of the twofold division of curated versus expedient artefacts reveals some broad patterns, a number of which correlate with patterning in terms of broad function, condition and size considered above. As a first observation, it is the case the proportions of curated versus expedient artefacts seem to be relatively similar for a number of contexts including Buildings 5.I, 5.II, 6.I and 6.IX. Arguably, Building 6.XII follows the same pattern with the predominance of curated over expedient finds.

The exceptions to this patterning are the assemblages from Building 6.II and, to a lesser extent, T12 midden deposits. Within these assemblages expedient artefacts comprise the largest proportions, although in the case of Building 6.II, the large numbers of clay sealings and tokens recovered from the richest rooms (e.g. Room 6 and - to a lesser extent - 7) have skewed the figures.

Comparison of curated and expedient artefacts by condition reveals similarities between a number of assemblages. For example, the majority of curated artefacts from Buildings 6.I, 6.XII, 6.XIV and T12 midden deposits are recovered in a fragmentary condition; conversely, the majority of expedient artefacts are recovered complete. In the case of Building 5.I and 6.IX a slightly different pattern is seen as, although curated artefacts are predominantly fragmentary, the majority of expedient artefacts are either damaged or broken. Buildings 5.II and 6.II both present rather different results from the other assemblages. In the case of the former, the majority of the curated artefacts are complete whereas the majority of expedient artefacts are broken. In the case of the latter, there is little difference in the condition of expedient and curated artefacts as both are predominantly broken (this is true for the assemblage as a whole and for the assemblages from Rooms 6 and 7 only).

5.8 THE CHARACTERISATION OF ARTEFACTUAL DEPOSITION IN, AND ABANDONMENT OF, SPACE AT TELL SABI ABYAD

From the summary and intrasite comparison of results in the preceding section it is clear that the patterning of the occurrence of artefacts by broad function, condition, material and size has afforded a number of observations regarding the character of artefactual deposition at Tell Sabi Abyad during the Level 5 and 6 occupations. Such patterning not only fuels inferences concerning the nature of site maintenance and abandonment procedures, they also provide material for the interpretation of the meaning of an artefact that has become refuse as a result of deliberate decision-making processes. This discussion pursues two main threads: the first concerns the reconstruction of the treatment of artefactual material during the habitation stage of a context's life and the second focuses on the abandonment of settlement contexts and artefacts. However, these threads are clearly interconnected and will be discussed together.

In general, the small find assemblages from the two Level 5 structures are relatively small and limited in variety. Furthermore, the small find totals are clearly skewed by the occurrences of single objects. However, analysis reveals that the majority of artefacts from both structures are either damaged or broken. The highest fragmentation rates exist for cutting tools, heavy processing artefacts and containing artefacts; the categories of personal ornament and storage/administration have the lowest fragmentation rates. When considered by size, it is apparent that there is a clear preponderance of artefacts between 2 and 10cm in length, but a significant number are over 10cm.

A comparison of the size, limited variety and condition of these Level 5 assemblages with other contexts from Level 6 suggests they are the product of a host of cultural formation processes from the habitation, through abandonment and into the post abandonment phase. In particular, the character of the two Level 5 assemblages accords well with ethnoarchaeological descriptions of assemblages that has been heavily depleted through the action of curate behaviour and/or delayed curation (e.g. Binford 1979; Tomka 1993; LaMotta and Schiffer 1999: 22; see **section 2.3.2**). Thus, the assemblages cannot support spatial analyses that are based on artefactual distributions alone. Fine differences between these two structures might in turn be indicative of variations in personal choices made on the abandonment of these structures, in curate behaviour(s) or in terms of the length of time during which people returned to the structures to deplete the inventory by removing artefactual material.

By way of contrast with the assemblages analysed from Level 5, the Level 6 features comprise a more rich and complex range of contexts and artefactual assemblages for comparison and discussion. The summary and comparison in the preceding section highlighted a number of interesting patterns. Chief amongst these was the recognition of the extraordinary wealth and variety of finds recovered from certain contexts, in particular burnt structures like Building 6.II (especially Room 6 and to a lesser extent 7) and midden deposits like those from square T12. However, the assemblages from a number of the other structures (Buildings 6.I, 6.XII and 6.XIV (except for Room 2) and those from the Open Areas (1-6) were far smaller and less varied. Of these latter contexts, Building 6.XII presents a useful starting point as – although located next to the prolific Building 6. 2 - it was unburnt and produced a very small and limited assemblage. The character of this structure and the small nature of its assemblage prompted Verhoeven's conclusion that it was abandoned some appreciable time before the conflagration that engulfed many of the other Level 6 structures (1999: 159; Verhoeven and Kranendonk 1996: 58). The small, largely fragmentary and limited repertoire supports the conclusion that this structured was either abandoned with little in the way of small finds or was depleted of finds in the period after abandonment. Notable, the sherd count from Building XII is also small compared to other Level 6 structures and the T12 midden deposits. With the exception of the sherd counts, the evidence from Building XII suggests marked similarities with unburnt structures from the succeeding Level 5 occupation (see Buildings 5.I and 5.II above) and parallels the type of depleted assemblages commonly associated with curate behaviour during and after the abandonment of a structure (see, e.g. LaMotta and Schiffer 1999: 22).

The occurrence of artefacts in other (burnt) structures from Level 6 is rather different. Indeed, such is the contrast between the assemblage from the unburnt Building 6.XII and those recovered from the burnt buildings of Level 6 that there is an inclination to view the latter's rich and varied assemblages as indicative of primary *in situ* deposition. However, analysis of assemblages from these burnt structures suggests interpretations that are more complicated than a simple disaster and rapid abandonment scenario. Clearly, certain aspects of these assemblages do not marry with such interpretations. For example, if these rich burnt deposits represent - in large part - primary depositions, how then can we explain the heavy fragmentation rates in these structures; fragmentation rates that are extraordinarily high for durable as well as fragile materials?

Further investigation into the character of the artefact deposition in burnt buildings reveals that artefact concentrations are found in but a limited number of small rooms (e.g. Room 6 in Building 6.II and Room 2 in Building 6.XIV). Indeed, for structures such as 6.I, 6.II and 6.XIV it is generally the case that the majority of the rooms produced relatively few finds. If these richer room contexts are removed from our calculations then across the other rooms depositional patterns are more akin to those seen in abandoned buildings such as Building 6.XII. In other words, fragmentation, artefact occurrence, material and size points to a similar pattern of abandonment and suggest that these rooms contain inventories that are not a direct reflection of *in situ* everyday activity.

In addition, consideration of the vertical distribution of small finds within the fill of one of the richer rooms (e.g. Room 6 of Building 2) reveals a spread of up to 50cm in depth between find levels (see above). Even allowing for the slope of the floor, it is apparent that many of the recovered finds were not located on or even very near the floor but were floating in the fill; thus, it is by no means clear that they were *in situ* (nor, had they been located on or near the floors, would it be correct to assume that they were primary depositions (see, e.g. Lightfoot 1993; Murray 1980; Rothschild et al. 1993)). Indeed, their occurrence in uniformly burnt deposits is the main reason for their consideration as *in situ* deposits. However, in Room 7 there is a record of finds being found in silts below the burnt deposits and above the floor of the room. This account, in tandem with the obvious intensity of a conflagration that burnt black and orange the pisé walls of this and other of the Burnt Village Level 6 structures, suggests that it is quite possibly the case that the heat of the fire burnt the silty fills black and orange making them stratigraphically indistinguishable to the excavator. In other words, it is therefore quite probable that the fire took place some time after the deposition of finds and fills within these richer rooms. The ramifications for synchronic spatial analyses are manifest.

With this latter point in mind, the midden deposits provide interesting data for comparison. In some ways the richest rooms are best paralleled - in terms of content and composition of assemblages - by the midden deposits. On the one hand this is encouraging as it points to the possibility of there existing a similarly representative sample of the artefactual repertoire of the settlement in both the midden deposits and the deposits from the richest of the Level 6 rooms. Conversely, it raises questions as to the activities that were involved in the creation of these room assemblages and in particular it raises doubts over the primary nature of these deposits. There is little credibility to the suggestion that in the space of $1.5m^3$ these finds should exist to be used *in situ* in the performance of domestic or other tasks. Instead, adherence to the argument that the space was still in everyday use requires the interpretation of such a small area as a storeroom. It is possible that such a wealth of artefactual material was stored but the variety of material and the condition of the artefacts recovered resists ready interpretation of the strategies involved in, or the motives behind, such storage practices. Indeed, as can be seen from the preceding section, Building 6.II Room 6 reveals a closer similarity to the T12 midden assemblage than to any other, regardless of the variable under consideration.

Thus, rather than believe that these rich rooms contain *in situ* material that relate directly to their function as archives or stores, a more plausible conclusion is that they are the product of middening activity within such rooms and/or buildings. In other words, the distribution and character of the assemblage is the product of more than one episode of deposition and probably reflects the changing use of space during this occupation level. Implicit in the latter interpretation is the assumption that the original function of the room will have changed prior to the conflagration. Certainly, in the case of Building 2 (Room 6), contextual parallels may be made between the occurrence of sealings in this room and occurrence of clay sealings at later sites, such as Arslantepe where the recovery of 130 clay sealings from a narrow room (R A77) of 4m by 0.80m is interpreted as evidence of the dumping of rubbish (Frangipane and Palmieri 1983: 316, 444-45). Support for such an interpretation is also provided by the occurrence of large quantities of sherds and other materials. The transformation of a room's function from say storeroom to dump however does not require a cessation in the habitation of the building; it is quite possibly the case that the building continued to be occupied while certain rooms were transformed perhaps from stores to dumps.

Given the relative paucity of other rooms (even the assemblage from the adjacent room 7 is by comparison small) it is feasible that the find concentration was deliberately created in the stages leading up to the final conflagration and abandonment of the structure. The deliberate agency involved is suggested by the contrast with other rooms within the same buildings. It can also be inferred from the concentration of artefacts that must clearly have been fragmentary at deposition. Furthermore, the occurrence of a quantity of broken figurines suggests intentional action, as it has been conjectured that the fragmentation of such artefacts (that commonly have symbolic associations) might have been deliberate (Verhoeven 1999: 229-331; see also Chapman 2000a: 25-26 and others cited in **section 3.3**). Though the sample is small, there can be no accident in the fact that in the two richest contexts analysed above artefacts associated with the category of ideology/ritual (e.g. figurines) occur in their most significant numbers and in a fragmentary state. Their occurrence points to special depositional environments that may be related to transformations in the buildings use or – perhaps - associated with the firing of the village: an episode itself that cannot readily or plausibly be explained as an accident. If these artefacts are the result of deliberate, symbolically motivated acts associated with a transformation in the nature of a structure or settlement the import for spatial analyses is considerable. The appearance of one introduced artefactual category opens up the possibility for the presence of others (see Chapman 2000a: 105-6 on the subject of the interpretive problems that are posed by burnt structures). The effect of such deliberate acts would be to obscure the patterning of *in situ* primary data altogether.

Additional support is given to the supposition that the abandonment of these buildings involved a variety of intentional actions by the presence of intact items that one might expect would have been removed as having some curate value (see **section 2.3.2** for discussion of curate behaviour). These intact items include large artefacts that one would expect not to have been accidentally lost or overlooked. For example, whole grinders and grinding slabs (in particular the latter) have been recovered; these are commonly found heavily damaged or broken in many contexts, most notably in the T12 midden deposits. Their discovery suggests some variation on the norm established by other contexts and resists the rigorous application of principles of least effort or transport and replacebility costs that often constrain ethnoarchaeological interpretations of abandonment processes. Instead, it is necessary to entertain the potential existence of both deliberate deposition (accretion) and selective removal of material (depletion) at the closure of the building and/or settlement.

Those non-structural contexts that have been analysed also stimulate a number of conclusions, both in their own right and in terms of the comparisons that they afford with the building contexts and assemblages. The first of these are the open areas found between buildings and defined by their presumed un-roofed character. Analysis has demonstrated that a principal feature of open areas is the relatively low occurrence of small finds by area and volume of material excavated, in contrast to many of the structures and the midden analysed above. Whereas the latter contexts generally constitute the most productive contexts, open areas at the site prove to be the least productive in terms of the variety and abundance of finds recovered at the intrasite level. This impacts on efforts to analyse and interpret the material from areas that are by their very nature subject to problems of interpretation from the outset of their excavation (see above). It also illustrates the thoroughness of the maintenance processes that operated.

As noted in relation to the discussion of richer burnt building contexts above, the T12 midden deposits are perhaps of greatest value to the analysis and present discussion in that they represent the deliberate operation of site maintenance activities that presumably involved the clearing of refuse from living spaces (including both interior and exterior space). In other words their existence implies that there were in place strategies to remove material away from the core areas of daily settlement activity. As noted above, the existence of such strategies is given further illustration by the patterning of debris deposited in open areas that are in general (given their situation and their size) surprisingly poor in artefactual content. It is also suggested by the comparative paucity of many of the buildings and rooms. In addition, the occurrence of an artefact class and its condition within the midden provides some suggestion as to the value of that artefact once it had ceased to be of use in its original function. Thus, for example, the midden deposits produce a broad range of artefact classes and materials; as varied as that recovered from any other settlement context and more varied than most of the structures and rooms considered in the preceding analyses. The majority of finds are fragmentary; indeed, for certain categories there is evidence of higher than average fragmentation (e.g. in condition and size of artefacts associated with heavy processing relative to other contexts). However, it is notable that for certain classes such as tokens there is a significant proportion of complete artefacts. While it is possible that these small finds are unintentionally collected and deposited in the process of cleaning (as might beads and pendants be), given their frequency of occurrence, their form and the material of their manufacture, it is more likely that they were deemed expendable. The same is probably true of other finds associated with storage/administration (e.g. sealings) (see above).

Arguably, the articulation of human behaviour at the time of abandonment (and the resultant patterns in the record) is a more fruitful and genuine avenue of research than that which concentrates on the spatial reconstruction of other daily activities (e.g. subsistence) through artefactual distributions. This holds true regardless of the burnt condition of the Level 6 village; indeed, the suggestion that the firing of the village was deliberate automatically casts doubt on those spatial analyses that require material to have been left *in situ*. A number of studies favour the current concentration on abandonment behaviour (e.g. effects on assemblages of curate behaviour, delayed curation or ritual associated with abandonment) and its impact on assemblages over attempts to map spatial activity through artefactual distributions (e.g. Schiffer 1987; Tomka 1993; see **section 2. 3.2**). For example, given the possibility that the conflagration was deliberate and that it was followed by a settlement hiatus, Graham's conclusion that at "permanently abandoned residential sites, not only is the bulk of the site furniture missing from the site, but the spatial arrangement of objects has more to do with the process of dismantling the site than with the use of activity areas" is particularly pertinent (1993: 39). It follows from the preceding analyses and discussion, as well as from a swathe of literature on the subject of site abandonment processes that the Burnt Village Level 6 settlement at

Sabi Abyad presents a rather more complex picture of cultural formation processes than that envisaged by Verhoeven's (1999) spatial analyses (predicated as it is on the identification of primary or *in situ* activity). This conclusion is also indirectly supported by other sites of similar periods. For example, Akkermans' report on the Halaf site of Khirbet esh-Shenef (also in the Balikh valley) concludes that

> It seems clear that not all buildings found at Khirbet esh-Shenef were necessarily used at the same time, or, in other words, while some structures were still in use, others may already have been abandoned. (1993b: 162)

Verhoeven recognises the presence of abandoned unburnt structures with sparse inventories within Level 6 but fails to elaborate on their significance for wider understanding of the character of the Level 6 settlement or the nature of its final abandonment (1999: 201). More importantly, and as a qualification on the above quote, it should be appreciated that structures themselves have complex life histories and that it is quite feasible for a building to remain in use while some rooms change in function or fall into disuse (see **sections 3.3** and **8.3** for discussion of the importance of the 'history of the thing' (Rawson 1993: 79)).

At the broad intra-site level a key observation that arises from the present analysis is that the majority of contexts produce material that was discarded or abandoned intentionally, this includes burnt and unburnt structures as well as midden deposits and – to a lesser extent - open areas (the latter appear to have been subject to rigorous maintenance strategies involving the removal of small finds). The intention to discard and abandon materials is manifested by their condition (complete or fragmentary), and the occurrence and the character of certain artefact groups and materials. For example, certain artefacts (e.g. figurines) appear to have been deliberately defaced and occur only in certain contexts (rich rooms of burnt structures) others occur in largely fragmentary state across contexts (e.g. heavy processing artefacts) but their fragmentation is variable (compare, for example, the small size of such fragments from T12 midden deposits against those from other contexts or consider the occurrence of intact artefacts in certain contexts). It is arguably the case that this variation is the outcome of different social practices associated with deposition of particular artefact categories in specific contexts (or places).

Artefactual deposition at the site is complex but a number of general practices can be outlined as having significant roles in the generation of patterning. In the main the pattern of find deposition indicates maintenance of built-environment with the removal of material away from structures and open spaces. The occurrence of richer deposits in structures or elsewhere is best explained in terms of middening. This occurred at the tell edge and in certain rooms within structures. With respect to the latter it is difficult to distinguish between provisional dumping, dumping in certain rooms while other parts of the same structure remained in use or deposition at or after the abandonment of the building as a whole. As a caveat to this however, it should be that realised that the these are not considered simply as rubbish in a modern (Western) sense; to do so would be to deny the heterogeneity and complexity of human categorisation processes, beliefs and value-systems connected with treatment and deposition of artefactual materials (see **section 3.3**). A feature of unburnt structures at the site is their relative poverty of small finds indicating either the removal of materials at abandonment or curate behaviour after abandonment. The existence of rich deposits in only certain rooms within the burnt structures could be a reflection of the timing of the firing of these buildings, the cleaning of these structures and deliberate concentration of material in only certain rooms leading up to the firing or the sealing of material after firing, preventing later depletion of contexts. Regardless of the range of possible interpretations entertained, it remains the case that differences between areas, structures and rooms are analysed here to be a product of differences in the activities leading up to and during the abandonment rather than necessarily a reflection of specific functional differences. These observations clearly have important ramifications for the archaeological reconstruction of past human activity at the site, particularly of *in situ* activities such as those associated with, for example, subsistence or craft working. Instead, *in situ* (habitation stage) activity -if it can be seen at all - obtains to the products of everyday maintenance activities.

Finally, the majority of contexts considered here present some interesting patterns and possible interpretations but few secure conclusions. What is clearest is that no simple depositional scenario (e.g. involving *in situ* analysis or primary and secondary deposition) will suffice for a synchronous intrasite reconstruction of past human activity. Furthermore, analyses suggest that the structures offer the most difficult contexts for interpretation of use and everyday activity through artefactual patterning. This is related in large part to the difficulties of interpreting abandonment and post-abandonment deposition. It is also connected to the way in which archaeological constructs and procedures create associations between things that bear little relation to the past, or to particular 'moments' in time (see **section 2.5**). Nevertheless, it is the case that patterning can be discerned in terms of the way in which different contexts and spaces are abandoned. In particular, the structures show great variety in the character of their assemblages, a variety that variously parallels or contrasts with other non-structural contexts (e.g. the open areas or midden deposits).

5.9 CONCLUSIONS: WIDER IMPLICATIONS FOR THE PRESENT STUDY

The general pattern of artefactual deposition within the built environment of Tell Sabi Abyad, with the exception of a few rooms and midden deposits, suggests that rooms, floors and identifiable trampled surfaces were left relatively devoid of artefacts. Thus, many areas produce only a few worn items (often larger artefacts, e.g. heavy processing equipment) and smaller items some of which might simply have been lost or overlooked (e.g. personal ornaments, tokens spindle whorls). This pattern is seen in both the heavily burnt structures of Burnt Village Level 6 (with a few individual rooms presenting something of an exception) and the less dramatically (e.g. unburnt) abandoned structures of both Level 6 and Level 5. In the case of those rooms that present exceptions to the rule (e.g. Level 6, Building 2, Room 6), the artefactual evidence on the whole does not support the conclusion that these preserve primary *in situ* remains. Instead, there is reason to believe that the room fills comprise a mix of artefactual deposits, only some of which might relate to the primary use of the structure during the habitation stage; others are likely to be the outcome of abandonment and – possibly - post-abandonment activities. This is not to say that Verhoeven's conclusions that these rooms existed as storage rooms (or more specifically archives) are entirely wrong for the size and form of many of these rooms do inspire conclusions that they were used as stores. However, the assumption that their assemblages are the result of storage activities alone or even at all is unjustified; it is more likely that the bulk of the material recovered relates to later (and several) stages in the life-cycle of a particular structure. A range of settlement studies of abandonment have demonstrated the changing use of structures, in other words, structures (like portable artefacts) can have a complex life history (see **section 3.3**). Thus, the use to which structures may be put can change during the habitation stage. Certainly it is the case that a building, for example, in the final stages of occupation and initial stages of abandonment might well have ceased to be used in its original function. With this in mind the consideration of a building as, say, a dwelling on the basis of dimensions and fixtures might be correct in describing its heyday use but not in describing its final use or last series of uses.

It follows that there is a need to test and resist the bias that interpretations of structural contexts (including built installations) can impose on the interpretation of associated artefactual materials. Consequently, within the present analysis an effort has been made to resist the bias of towards structural contexts and to examine the complexity of artefactual deposition by attempting the analysis of a varied range of contexts (e.g. buildings, open areas and midden deposits). The investigation of artefactual deposition in contexts other than room fills for example can be used to evaluate the occurrence within architecturally confined space. The comparative analysis of Room 6 in Building 2 and the midden deposits in T12 provide a clear demonstration of the interpretive benefit of such an approach. Criticism of such an holistic approach as presented in the present work might be directed against the comparing of different contexts on the grounds that one is not comparing like with like. Thus a room fill is perceived as being so fundamentally different from a midden by virtue of being a room fill contained by architecture therefore to compare depositional environments in the same way is mistaken. However, such criticism takes the view that they are different by virtue of their perceived function during the habitation stage of the settlement. This study takes the opposite position that they are more similar because they were abandoned and therefore their final makeup does not necessarily reflect the original character of their habitation. Overall the net outcome has cast doubt on the truth of reconstructions of *in situ* behaviour that presume a strong degree of synchronicity between depositional events and that are based exclusively on distributional analyses of artefacts in the built environment.

Just as a lack of awareness of the changing histories of structures leads to flaws in spatial analysis, the simple patterning in many such spatial analyses in terms of the use-life function of an artefact relating to its context of deposition is flawed for clearly artefact function does not directly correlate with its treatment at the point of discard. To this end, although consideration of broad functional category is a useful heuristic device for categorising and analysing large and varied assemblages, different patterns can be revealed for interpretation if there is also consideration of other attributes such as material, condition, reworking and size. Indeed, if we recognise that artefacts have value outside of the narrow parameters of function (see **section 3.3**) it is essential that we explore a variety of attributes in order to enrich understanding of artefactual assemblages and their depositional contexts. Through the analysis of attributes such as condition, size and curation it has been possible to detect patterns of similarity and difference between contexts and assemblages (see **sections 5.7** and **5.8**). These patterns have cast doubt on the efficacy of conventional spatial analytical approaches but at the same time have also suggested complex strategies for the treatment, retention and deposition (or abandonment) of artefacts that differ in some respects from those of the present (and, of course, from those witnessed at the other two case study sites).

Clearly, then, the analysis of Sabi Abyad, particularly given the existence of an earlier spatial analytical study of the site, has stimulated a number of conclusions and interpretations that impact on the study as a whole. Of particular importance is the realisation that two-dimensional horizontal spatial analyses are flawed where they are is principally reliant the assumption of primary or *in situ* deposits, of synchronicity and of a finite number of functions for built space. The preceding analysis and discussion also has some meaning in relation to wider debates concerning the character of early village society. Verhoeven (1999) views a clear division in the Late Neolithic settlement at Sabi Abyad between the nomadic pastoralist and sedentary horticulturist way of life, a division that is allegedly manifested in the distinction between round and rectangular architecture in the settlement (**section 5.4.2**). However, despite the catastrophic way in which much of the Level 6 met its end, the preceding analysis reveals that there is little justification for seeing such a clear division in terms of the character of the artefactual deposition. Instead, there is evidence to suggest a complex array of deliberate action associated with the maintenance of the built environment and the treatment of both artefacts and structures at the point of abandonment. Midden deposits serve to demonstrate the broad array of artefact categories being deposited as waste, open areas with their paucity of finds indicate the deliberate clearing of the spaces between structures, rich deposits of finds (including sherds) from some rooms point to activities that span habitation through abandonment stages of occupation and few finds in many structures indicate a tendency either to leave structures relatively clear or to return to remove material at a later stage. Some artefact categories and the combinations of categories that occur are also of interest. Thus, sealings and tokens are found in conjunction with large number of sherds (in some rooms but also in the midden deposits) but so too are ceramic artefacts associated with textile production. One interpretation is that this reflects storage behaviour (*pace* Verhoeven 1999) but a more plausible interpretation is that this is consistent with deliberate refuse and abandonment practices; hence the fragmentary condition of the artefacts, the lack of reconstructible vessels and the occurrence of such a varied artefact assemblage.

On a final concluding note, the destruction of a settlement through fire, however extensive, does not necessarily provide a 'snapshot' of a past occupation frozen in time. Fires can be set deliberately; they can also take place at any point in the life-time of a structure or settlement. Though they may occur rapidly and catastrophically as an event they do in fact seal, obscure and even obliterate contexts and materials that are the remains of many and disparate activities the majority of which bear little temporal or other association with the final stages of the settlement's life. Clearly, then there is a lesson to be learnt concerning the need for a caution in our approaches to the interpretation of the use of space through patterning artefactual deposition.

CHAPTER 6

ANALYSIS OF TELL JERABLUS TAHTANI, SYRIA

6.1 THE SITE

Tell Jerablus Tahtani (henceforth Jerablus) is a small multi-period settlement site beside the western bank of a branch of the Euphrates River in North Syria, four kilometres south of the Syro-Turkish border and the ancient city of Carchemish (on the same river bank) (**Figures 1** and **40**). The Tell measures some 220m x 180m x 16m high and is an oval steep-sided mound with a sloping southern spur. A larger mound, Tell Shioukh Fouqani, is located on the opposite (eastern) riverbank. Unlike the latter, which appears to be situated on a Würm gravel terrace, Jerablus was founded directly on the active floodplain. Both sites are within the area to be flooded by the waters of the Tishreen Dam that has been constructed 60km further south, at the head of Lake Assad.

Jerablus was first mentioned by Woolley who referred to the site as Tell Alawiyeh, "the little Tell... on the river front" (Woolley 1921: 38, Pl. 2, Fig. 5). However, he did not work there while excavating at Carchemish from 1911-1920. In the 1970s, Copeland and Moore surveyed Jerablus, and in a study of its finds, de Contenson noted the existence of several periods of occupation: Early-Middle Bronze, Roman-Byzantine and Islamic (Sanlaville 1985: 53, 70, Fig. 14). More recently, Stein's 1989 survey recovered Uruk pottery from the mound (McClellan and Porter n.d.).

6.2 HISTORY OF EXCAVATIONS

The first systematic excavations were undertaken by a team from the University of Edinburgh, directed by Prof. E. J. Peltenburg under the auspices of the Syrian General Directorate of Antiquities and Museums' Tishreen International Rescue Programme.

An initial survey conducted in 1992 confirmed de Contenson's earlier periodization of the site, with the exception of the Middle Bronze Age. It also yielded significant quantities of Uruk pottery and distinctive Late Iron Age objects (e.g. Aramaic type figurines). Since the 1992 survey, seven seasons of excavation have been conducted in four areas of the site (**Figure 41**) and currently the site is in the final stages of post-excavation and publication.

By its very nature, Jerablus is a multiperiod site (see, e.g. Tringham on the formation of Tells (2000: 34); see also Davidson 1976; Rosen 1986). Excavations have identified five main periods of occupation beginning in the mid-4th millennium BC, namely: Late Chalcolithic (Uruk) phase (Period 1); Early Bronze Age (Period 2A-B); Late Iron Age (Period 3); Roman (Period 4); and Islamic (Period 5). The first two periods are of principal interest here and require further introduction ahead of the contextual analysis.

The first settlement (Period 1) at Jerablus was founded in the Late Chalcolithic/Uruk period and, in the limited exposure opened by excavation, the occupation evidence comprises disturbed walls and floors laid directly on virgin soil. The settlement's inhabitants used Late Uruk pottery and not the contemporary, local Late Chalcolithic wares. The choice of location beside the Euphrates may have been linked to river born trade and communications rather than to the agricultural exploitation of the flood plain.

The Early Bronze Age (Period 2) at the site comprises several phases including a pre-fortification settlement, a fort and a high status, monumental tomb. In the mid-third millennium BC a stone-founded mud brick fortification wall was placed over an earlier burnt settlement (see Peltenburg 1994a: 106-7). The enclosed fort area comprises some 300m^2. This fort wall was installed together with a major drain that was placed *c.* 0.50 m. below floor levels and exited through the wall near its base. The construction of the fort and the layout of the settlement suggest a measure of central planning and coordination.

A gap in occupation of some 1500 years exists between the end of the Early Bronze Age occupation of the site and its re-occupation in the Later Iron age. Following this, there is evidence of Roman period settlement with a number of buildings terraced into the southern slopes of the mound. Finally, in the Islamic period it appears that a small farming community was established again on the southern spur below a monumental structure that was erected on the crown of the Tell. These (post-Early Bronze Age) occupations are not considered here except where it is observed that later pitting or other activity from these phases has caused marked disturbance to earlier occupations that are of specific interest to the present study.

6.3 PREVIOUS RESEARCH AT THE SITE

Jerablus has been the subject of a number of preliminary reports (e.g. Peltenburg 1993a, 1994a-d, 1995, 1996a-b, 1997b-c, 1998b, 1999a-d; Peltenburg et al. 1995, 1996, 1997, 2000b, forthcoming a) and artefactual analyses (Bolger and Stephen 1999; Campbell 2000; Peltenburg 1997a; Peltenburg and Stephen 2002), and is currently in the final stages of post-excavation and publication. In addition, an undergraduate MA dissertation has been completed, a recently submitted PhD and an unfinished PhD theses utilise data (glyptic and architectural respectively) from the site.

6.4 THE SIGNIFICANCE OF JERABLUS TO THE WIDER STUDY

The contribution of the Jerablus case study to the study as a whole is at a number of levels. First, Jerablus is a complex multi-period Tell site of a different kind to Sabi Abyad. Whereas the latter covers a relatively large area and the numerous settlements appear to be substantial but - by and large - relatively open, Jerablus is smaller and the majority of the excavated settlement (namely that belonging to the fort phase) is confined to the area within the fort walls (**Figure 41**). Within this fort area, the settlement consists of densely packed rooms with none of the substantial open spaces of the kind seen at Tell Sabi Abyad; indeed, the scope for such areas within the confines of the fort wall is limited. In addition, there exists some continuity in the location of structures through time, as walls and rooms are often built directly over each other. This continuity might have been enforced by the constraints of space, however it is possibly also a reflection of a temporal continuity in other, culturally defined, criteria for the organisation and division of space. The very different nature of the site means that Jerablus presents very different problems for contextual and artefactual analyses. Furthermore, as a case study Jerablus Tahtani is also representative of a different 'type' of Tell site, one that is circumscribed by a retaining wall and has seen dense occupation. Indeed, it is clearly the case that different cultural, economic and environmental circumstances apply to Jerablus than to the other two sites. All these different features of occupation at the site naturally create contrasting problems for the archaeological interpretation of past activity and social practices.

Second, on a related but more site specific note, Late Chalcolithic and Early Bronze Age Jerablus occupies an important location on the floodplain of the Upper Euphrates River just 4km south of Carchemish, a major ancient city. During these periods the area witnessed contact between local indigenous cultures and the Uruk culture of Southern Mesopotamia, the rise of urban entities and the development of early state society. In other words, these occupations at Jerablus coincide with periods that saw fundamental socio-political changes. Thus, for example, the Early Bronze Age pre-fort and fort settlement occur within a period that was marked by a number of large urban settlements in Northern Syria, including nearby Carchemish and the city of Ebla (Tell Mardikh), to the south of modern Aleppo. The 'Ebla State Archives' (dated to c.2600BC) reveal that there was, by the mid-third millennium, a high degree of economic integration within the region, which was controlled by a strongly bureaucratic and centralised (palace based) administration (Matthiae 1993: 526). Some scholars have argued that prior to the rise of the Kingdom of Ebla in the mid-3rd Mill. BC, urban settlements and city-states already existed at sites like Carchemish. With this in mind, the small site of Jerablus is of considerable importance given its proximity to and broad contemporaneity with occupations at Carchemish. It is probable that the site of Jerablus was profoundly influenced by the historical development of this great city, however the sequence of occupation that the site provides (e.g. from the Local Late Chalcolithic through to the Early Bronze Age fort) makes Jerablus important in its own right. The construction of the fort wall and drainage systems, continuities in settlement plans across levels and evidence of deliberate levelling prior to rebuilding suggest some kind of centralised control or decision-making. In anticipation of the later discussion section below (**section 6.7**), interpretation of artefactual deposition within the built-environment at Jerablus Tahtani reflects the physical characteristics of the settlement and, more significantly, the socio-political and cultural backdrop to site maintenance and abandonment activities.

Although, it is not the purpose of the present chapter to further explore the import of the Jerablus analysis on wider cultural issues such as urbanism or secondary state formation (these will be considered further in **section 8.3**), the potential connections between such key moments of socio-political development and the character of the contexts and assemblages is of interest. Are these periods of profound socio-political and economic change traceable through the reconstruction of the changing character of artefactual deposition at the site?

Prior to the analyses of a range of contexts from Jerablus there follows below a section on various artefactual and contextual considerations that are specific to the site.

6.5.1 ANALYTICAL CONSIDERATIONS

As noted above, Jerablus presents a rather different challenge to the other two sites considered in this study. Like Sabi Abyad (**Chapter 5**) it is multiperiod Tell site, however this is pretty much where all but the most general of similarities end. In terms of the nature of occupation and the degree of disturbance that appears to have occurred to occupation levels at the site, Jerablus differs greatly. Furthermore, the pattern of abandonment of contexts and of finds also differs to Sabi Abyad with the latter's rich assemblages from buildings and midden-type deposits serving as a clear contrast to the rather scant assemblages recovered from non-funerary contexts at Jerablus.

6.5.2 CONTEXTUAL

A substantial exposure of archaeological contexts has been achieved in some areas and for some periods of occupation at Jerablus, presenting a variety of features including fortification walls, buildings, rooms, passageways, drains, pits (of various periods and function) and graves. This variety is reflected in the selection of contexts for analysis. Furthermore, the multiperiod nature of the mound has resulted in the exposure of contexts from numerous occupation levels. However, the majority of selected contexts are from Early Bronze Age fort levels.

A significant feature of the later Early Bronze Age occupation is the fort wall - or series of fort walls (there are at least two identified in Area IV) - that appear to have formed the 'container' for, or perimeter of, the greatest density of settlement occupation. From the evidence of a number of exposures at this site, the environment within this enclosed space consisted of relatively small rooms and structures that either shared party walls or were separated by narrow passageways. Within the fort phase of occupation at Jerablus it is also clear that there are several episodes of rebuilding that involved the sometimes deliberate infilling of earlier rooms and the rebuilding of new structures sometimes directly over old.

By comparison with Sabi Abyad the evidence of hiatuses between occupations marked by clear boundaries between building levels is limited (exceptions are presented by the apparent change to cemetery type use in Area IV at the close of the Level 5 and Level 4 occupations). Instead, there is a great continuity in the character of the 'fort period' occupations, from the initial foundation of the fort wall above an Early Bronze open settlement through to the last stages of site occupation during Early Bronze IV. This is not to say with any surety that the occupation was fully continuous for the record cannot support this, but it is to say that there is greater evidence of continuity in settlement plan than perhaps at Sabi Abyad. There are, however, a range of factors that cause problems for the reconstruction and analysis of the use and abandonment of space within the settlement. For example, there are numerous graves and a number of large and deep Islamic period pits cut into areas of the Tell that truncate earlier layers and features at the site. Indeed, particular disturbance has been caused by such features to some of the Early Bronze architecture in Area IV and to parts of Area II.

Analysis is conducted by area (Areas I, III and IV only), level (phase assigned by the excavator(s) to each trench) and then - in certain circumstances - by context. Discussion will broadly focus on the areas and levels and less on individual structures or features. A brief investigation of the funerary record follows the analysis of the other settlement contexts and involves graves from Area IV only. The analysis of a spread of similar and different contexts is designed to enable useful comparisons to be made with regard to reaching some conclusions on the subject of the nature and extent of cultural transformations that operated at the site.

The contexts analysed from the site include buildings, rooms, passageways, drains, open (external) areas, pits and graves.

Ahead of the analysis there follows below a section concerning artefactual considerations applicable to all contexts.

6.5.3 ARTEFACTUAL

Jerablus is a rich site artefactually, registered small finds include many items of ground stone, pottery and metal; objects manufactured from bone are, however, more rarely recovered. The funerary record from the Early Bronze Age fort occupation levels is particularly rich with many tombs producing intact pottery vessels, ornaments of bone, stone and metal and some copper alloy weaponry (see **section 6.6.6** below).

The broad functional categories that are utilised in the present analysis follow those used for the analysis of Sabi Abyad and Kissonerga-Mylouthkia and are presented in **Table 56** (see also **Figures 42-43** and **Appendix 1**). It should be noted that the additional category of weaponry was not used for Sabi Abyad or Kissonerga-Mylouthkia, nor does it feature significantly in the present analysis. The sherds recovered from the site are not considered in any depth in this case study, as the data that is currently available for study does not allow for a more detailed analysis. Instead, only pot profiles or reconstructible vessels are included in analysis as these are registered as small finds. Other ceramic objects that are considered include bobbins, perforated discs and model wheels.

The majority of stone items comprise artefacts associated with heavy processing, in particular the processing of grain or other foodstuffs. Chief amongst these are the querns and rubbers (also known in the literature as manos and metates (e.g. Schlanger 1991)) that are commonly associated with grain processing. These comprise some of the most artefacts classes from non-funerary contexts. Metal finds from the site are far fewer than stone and pottery. They are most commonly associated with grave contents and hence are - by and large – associated with clear acts of structured deposition, a point that will be considered further later in this chapter.

6.6.1 ANALYSIS

In the following analysis only contexts from three of the four main areas of excavation are considered, namely: Areas I, III and IV. Area II is omitted from analysis by virtue of the manifest difficulties that exist in establishing the stratigraphic relationships across the area and the limited architecture in the area (once the monumental tomb 302 and associated passageway are discounted). The data presented here, and in the accompanying database (**Appendix 3**), is taken from original site records, specialist reports and existing databases.

The following analysis is divided into five sections: the first three contain analyses of material from Areas I, III and IV; the fourth contains a short consideration of funerary contexts from Area IV; and the last comprises an intrasite comparisons of results.

6.6.2 AREA I

In the present analysis, Area I receives less attention than Areas III and IV because of the limited extent of the exposure (both horizontally and vertically) and the character of the contexts (**Figure 41**). In the case of the former, there are few architectural or other features that were exposed in full or at least to a substantial part. Nevertheless, the area is important in the overall understanding of the site, placed as it is between the monumental tomb and the main Tell mound, it includes the entranceway into the Early Bronze Age fort. Only contexts from Levels 4 and 5 are analysed below, both of which are dated to the Early Bronze Age fort occupation.

The following analysis adheres to existing occupation levels and (where applicable) phases outlined by the excavators, however it should be noted that the phasing of this area (and indeed other areas) remains subject to revision during the course of preparations for the final publication of the site.

LEVEL 4

Level 4 is associated with the later stages of the fort occupation in Area I and has been subdivided into 2 phases.

A number of contexts are assigned to the most recent phase, including a series of rooms (e.g. 1678, 2024, 2102 and 2423; see **Figure 44**). However, despite the number of distinct rooms that have been identified, only 28 finds in total can be clearly ascribed to level 4; 17 are from structural contexts (mainly 'room' fills) and the rest from mixed 'general' layers (**Table 57**). Artefacts associated with the categories of textile production (41.4%), containing (20.7%) and other (20.7%) proved the most numerous (**Figure 45; Table 58**). Whereas those associated with heavy processing (10.4%), personal ornament (3.4%) and ideology/ritual (3.4%) have rather lower occurrences. Considered as a whole in terms of material (**Table 59**) the majority of artefacts are of pottery (51.7%), followed by stone (31%). The former reflects the pattern witnessed for broad functional category.

Overall, in terms of condition, the majority of recovered artefacts (55.2%) were broken. In addition, a significant number of artefacts are recorded as heavily worn. Artefacts from the categories of personal ornament and ideology/ritual have the highest fragmentation rate (100%) followed by heavy processing (66.7%). The categories of textile production, containing and other have the lowest fragmentation rates (50%).

Analysis of this assemblage by room reveals that 2024 and 2102 proved the most productive, yielding 5 small finds apiece. Both of these assemblages included pivot stones and containing equipment, but Room 2024 also produced single artefacts associated with the categories of heavy processing and textile production. Of the other rooms, 2423 produced artefacts associated with textile production from room fill deposits and heavy processing from the wall fabric; 1678 yielded a single pivot stone from its entrance.

Level 4.2 proved more productive than the preceding phase, producing a total of 71 registered artefacts. However, the majority (64.8%) of these finds were recovered from mixed 'general' contexts and not from structures, despite there being a number of rooms assigned to this occupation phase (e.g. 2495; see **Table 57**). Artefacts associated with textile production (35.3%) and personal ornament (19.7%) proved the most numerous (**Figure 46; Table 60**). The latter are relatively numerous by comparison with other occupational levels at the site; in particular, there is a significant occurrence of pins that are normally found in funerary contexts and again many come from mixed general deposits within the level. Thus, it is quite possible that they originate from a grave that has since been lost to erosion and/or other disturbance. Artefacts associated with storage/administration (5.6%), heavy processing (5.6%), and ideology/ritual (1.4%) have low occurrences. The first of these are, however, invariably rare at the site: three of the four finds from the category of storage/administration are impressions on sherds, and the fourth is a cylinder seal. The majority of the artefacts are of pottery (46.5%), followed by stone (18.3%), metal (11.3%), bone (9.9%) and glass (5.6%) (**Table 61**). The occurrence of the latter in general deposits attributed to this phase is indicative of later disturbance, whereas the predominance of pottery artefacts reflects the pattern witnessed for broad functional category.

Analysis of this assemblage by condition reveals that there is a significant majority of broken artefacts (60.4%). Those artefacts associated with the category of containing had the highest fragmentation rate (100%) followed by storage/administration (75%), heavy processing (75%) and other 66.7%). Those artefacts associated with textile production had the lowest fragmentation rate (44%) followed by personal ornament (50%).

Only room 2495 is worthy of individual mention, producing a small assemblage of 5 finds (3 from fills and 2 from the walls) that included a pivot stone and artefacts associated with heavy processing, textile production and personal ornament.

A consideration of finds from this assemblage by longest dimension reveals that the majority are between 2 to 5cm in length, although a significant proportion are also between 5 to 10cm (especially for phase 4.2) (**Figure 47**; **Table 62).** A slight majority of the Level 4 artefacts (both phases) are of curated form (**Table 63**). Whereas the bulk of these are incomplete, a clear majority of expedient finds are complete.

LEVEL 5

Level 5 corresponds to an earlier period of the Early Bronze Age fort occupation at Jerablus and the following analyses include a number of structural contexts. The architectural units and features of particular interest here comprise a series of rooms to the east of the area, east of the entrance into the site (**Figure 44**). These rooms are placed just within the fort wall and appear to have undergone modification and change in their function during the course of the fort occupation.

Although, the total number of finds ascribed to this level is only 63, Level 5 clearly differs from Level 4 in terms of the contextual occurrence of artefacts. In particular, the majority of finds (95.2%) can be assigned to structures as opposed to general mixed deposits (as in the case of Level 4.2) (**Table 57**). Those artefacts associated with textile production (52.4%) proving the most numerous followed by other (14.3%). Artefacts associated with heavy processing (12.7%), containing (11.1%) and ideology/ritual (6.3%) have low occurrences (**Figure 48; Table 64**). The latter, however, are invariably rare at the site. Artefacts associated with storage/administration are not present and those from the category of personal ornament (3.2%) are least well represented. The majority of the finds are of pottery (68.3%), followed by stone (19%), bone (4.8%) and clay (4.8%) (**Table 65**). The predominance of the pottery artefacts reflects the pattern witnessed for broad functional category.

Analysis of the Level 5 assemblage by condition reveals that there is a significant majority of complete artefacts (66.7%). This reflects the low fragmentation rate amongst those artefacts associated with textile production (21.2% broken), which chiefly comprise perforated discs. However, the majority of these are heavily worn and - though intact - many show damage from use. Artefacts associated with ideology/ritual have the highest fragmentation rate (100%) followed by containing (57.1%), personal ornament (50%), heavy processing (50%) and other (33.3%).

Chief amongst these multiphase spaces is room 1569 (see **Figure 44**) that, following the initial phases of its construction and use, saw modification with the construction of new mudbrick walls within the original room, forming possible silos or storage rooms. It is these latter that produced the majority of finds (a total of 33). A clear majority of the finds are of pottery, in particular perforated discs are most common, the bulk of which were recovered intact. Metal finds are absent and those finds associated with heavy processing (e.g. rubbers and querns) are also largely absent. The occurrence of figurines is, however, unusual for such contexts at the site.

A consideration of finds from this assemblage by longest dimension reveals that the majority are between 5 to 10cm in length, although a significant proportion are also between 2 to 5cm (**Figure 49**; **Table 62).** The clear majority of Level 5 artefacts are of expedient form (**Table 66**). The bulk of these are complete, whereas a clear majority of curated finds were recovered in a fragmentary condition.

6.6.3 Area III

Area III is of interest to this study for two chief reasons. First, it has produced a number of levels and associated contexts that span a long period of the fort occupation and presumably include contexts that are broadly contemporary with the fort occupation levels excavated in Areas I and IV. Consequently, an analysis of contexts from Area III provides material for comparison with these other areas. Second, it is only in Area III that an exposure of Pre-fort Early Bronze Age settlement, Uruk Levels and Local Late Chalcolithic activity was achieved. Although, these pre-fort level exposures are small and hence of limited value in terms of supporting extensive comparisons with the fort stage occupation, there are meaningful comparisons that can be made. In particular, these different exposures facilitate conjectural conclusions on the character of temporal change that might have occurred at the site as it developed from an open settlement in its early stages to a fortified and densely packed settlement during its floruit in the Early Bronze Age.

The fort phase occupation levels from Area III were exposed in a relatively small area of excavation (**Figure 41**), nevertheless certain characteristics of these deposits and the finds recovered provide potential information regarding the nature of the abandonment, reuse and the deposition of finds on the site as a whole. The pre-fort occupations identified at the site are confined to a small part of Area III, outside of the later fort wall (which was left upstanding). Levels 7-13 constitute the subdivisions of this period of activity on the site.

There follows a consideration of contexts and finds by level. At the outset however, it should be noted that on the whole many of the rooms are largely devoid of small finds from fills and floor contexts. Indeed, some of the levels and structures identified produced no registered finds from clear structural contexts (contrasting thus with Area IV considered below in **section 6.6.5**).

Level 4

Level 4 (**Figure 50**) comprises an Early Bronze Age fort occupation. Architecturally, this level is represented by a number of discrete rooms, substantial walls, floor surfaces of compacted silt and a variety of *in situ* fixtures and fittings (e.g. hearths and bins). It is probable that this level is composed of several sub-phases of occupation.

A total of 98 finds have been assigned to Level 4, 72.4% of which were recovered from both the fills and fabric of structures (see **Table 67**). The rest were recovered from mixed 'general' contexts. Artefacts associated with textile production (25.5%) and heavy processing (21.4%) proving the more numerous than the rest with the exception of the category of other (26.5%) (**Figure 51**; **Table 68**). Artefacts associated with containing (11.2%), personal ornament (8.2%), storage/administration (5.1%) and ideology/ritual (2.1%) have relatively low occurrences. The majority of the artefacts are pottery (39.8%), followed by stone (34.7%), clay (20.4%), metal (3.1%) and bone (2%) (**Table 69**). The predominance of the pottery and stone artefacts is reflects the patterns witnessed for broad functional category.

When considered by condition there is a significant majority of complete artefacts (57.1%). Artefacts associated with the categories of storage/administration and ideology/ritual have the highest fragmentation rates (100%) followed by heavy processing (71.4%) and personal ornament (62.5%). The category of containing shows the lowest fragmentation rate (9.1%) followed by other and textile production (40%). The majority of artefacts recovered were between 2 to 5 and 5 to 10cm in length, however a significant number of artefacts were over 10cm and some over 20cm (**Figure 52; Table 70**).

Analysis using the twofold distinction between curated and expedient artefacts reveals that curated artefacts are in an overwhelming majority (87.2%) (**Table 71**). A slim majority of these are complete (51.5%) whereas a rather larger proportion of expedient finds are complete (60%).

A key feature of this level is the general paucity of the assemblage from the larger architectural units (e.g. buildings and rooms) excavated (see **Table 67**). Building 516, proved the most productive yielding 11 finds; however, 7 were recovered from the wall fabric. The bulk of this assemblage, particularly those artefacts from the latter contexts, was associated with the category heavy processing.

In the case of Room 1980, the excavator clearly identified three floors associated with 3 phases of occupation of the room. However, despite this evidence of prolonged use, the room proved remarkably unproductive of small finds (5 were recovered in total, including artefacts associated with the categories of textile production, heavy processing and storage/administration). One find was associated with a fill above the last occupation floor; none were associated with the fills or floor of the second occupation phase. The earliest (third) phase, contemporary with the primary fort occupation alone produced small finds from possible occupation deposits and a pit. A single further find from the category of textile production was recovered from one of the walls.

With regard to the other rooms, room 2777 produced only one small find (belonging to the category of textile production) from an occupation deposit, whereas Rooms 2775 (single finds from the categories of containing and other) and 2776 (single finds from the category of textile production) each produced only two finds from their fills.

It is of additional interest that, in the case of rooms 1980, 2776 and Building 516 the excavator observed that they were filled by single homogenous fills and interpreted this as evidence of deliberate infilling. This evidence will be referred to later as it naturally has serious implications for the patterning of artefactual deposition and human activity at the site.

A number of drains associated with the Level 4 occupation(s) also yielded several small finds. For example, drains 2982 and 2983 produced 15 and 13 finds respectively, proving richer than the other structural contexts. In the case of the former, a broad range of finds were retrieved including artefacts from the categories of heavy processing, textile production (perforated pottery discs are the most common artefact class), containing, personal ornament, storage/administration and ideology/ritual. The heavy processing artefacts formed part of the drain construction (sides and floors). The same appears to be true for drain 2983, which also yielded artefacts from the categories of heavy processing, textile production, storage/administration and ideology/ritual.

LEVEL 7

Level 7 is the most recent of the pre-fort levels identified at the site and dates to the beginning of the Early Bronze Age (**Figure 53**). The exposed features suggest that, during this period, Jerablus constituted a small, open and unfortified settlement. The architecture consisted of rectilinear structures with mudbrick walls that were built on stone foundations in some cases. Floors and occupation deposits were also identified in association with some of the rooms or internal spaces.

The finds assigned to this phase are few (n=22), rather fewer still (n=16) can be assigned the main architectural units of this level: Buildings 985, 1006 and 1167 and room 2258 (see **Figure 53; Table 67**). Only a limited number of categories are represented within this small assemblage with artefacts from the category of containing proving most numerous (31.8%) followed by other (27.3%), heavy processing (22.7%) and textile production (18.2%) (**Figure 54**; **Table 72**). Artefacts of pottery proved most numerous (45.5%) followed by stone (40.9%), bone (9.1%) and a single find of metal (4.5%) (**Table 73**).

A significant majority of the recovered assemblage (68.9%) consisted of fragmentary objects. Artefacts from the category of other showed the highest fragmentation rate (100%) followed by containing (85.7%), heavy processing (40%) and textile production (25%). The majority of artefacts were between 5 to 10cm and 10 to 20cm in length, a significant number were between 2 and 5cm but there were no artefacts of less than 2cm in length recovered (**Figure 55; Table 70**). The bulk of this assemblage comprises artefacts of curated form (75%), a majority of these were recovered in fragmentary condition (66.7%) (**Table 74**). In contrast, the majority of expedient finds were recovered intact (60%). For example, a number of artefacts of expedient form from the category of heavy processing (e.g. a pounder and whetstones) were recovered intact, though somewhat worn.

LEVEL 8

Level 8 represents a problematic phase of activity as it predominantly consists of a number of curvilinear pits cut into a probable surface or series of surfaces; however, no clear occupation surfaces were identified (**Figure 56**). In the absence of any architectural features it would appear that this was an area of extramural activity.

Broadly speaking the level proved relatively unproductive in terms of the quantity of small finds recovered (n=13). The majority of finds were from pit fills (n = 10); the rest from 'general' deposits (n=3) (**Table 67**). Most artefacts belong to the categories of textile production and other

(40% each); there are only single occurrences of artefacts associated with the categories of personal ornament, heavy processing and containing (**Figure 57; Table 75**). Artefacts of pottery (56.25%) proved most numerous followed by stone (31.25%) and bone (12.5%) (**Table 76**).

The majority of finds are complete (69.2%), including all finds from the categories of personal ornament, heavy processing and containing. The relative absence of heavy processing equipment and the more common occurrence of artefacts associated with the category of textile production contrasts with Level 7 but is paralleled in the earlier Level 9 (see below). The highest fragmentation rates were from textile production and other (40%). Analysis by size indicates similar patterns to Level 7 with the exception of the occurrence a find (personal ornament) of less than 2cm in length (**Figure 58; Table 70**). A slight majority of finds were of curated form (53.8%). The bulk of these were recovered in fragmentary condition (71.4%), whereas an equal proportion of complete and fragmentary expedient finds were recovered (**Table 77**).

LEVEL 9

The Level 9 occupation is ephemeral and associated with the patchy remains of walls and a pavement (**Figure 59**). Of all the occupation levels identified in Area III, pre-fort level 9 is one of the most unproductive in terms of small finds, producing only 11 in total. Despite the presence of structural remains, the bulk of the finds (n=9) were recovered from general contexts (i.e. deposits that could not be associated with any particular activity or occupation/habitation) (**Table 67**). The remaining two artefacts (a perforated pottery disc and rubber) were recovered from a stone pavement (1525).

Artefacts associated with the category of textile production are most numerous (54.5%) followed by heavy processing (18.2%); personal ornament, containing and other are represented by single finds only (**Figure 60; Table 78**). The majority of these finds are of pottery (63.6%) followed by stone (13.2%) and bone (13.2%) (**Table 79**).

A significant proportion of the artefacts recovered are fragmentary (63.6), with the highest fragmentation rate for the categories of personal ornament (100%) and other (100%) followed by textile production (83.3%). The majority of finds were between 5 and 10cm in length, no finds smaller than 2cm or larger than 20cm were recovered (**Figure 61; Table 70**). A large majority of finds were of curated form (81.8%), all were recovered in a fragmentary condition (**Table 80**).

Little can be concluded from such a statistically small sample, however the limited size and variety of the assemblage and the presence of structural elements demonstrate a similar pattern to that seen in other levels and areas of the site.

LEVEL 10

Level 10 is associated with a period of pit cutting and disturbance (also known as the Square Pitting Phase, as distinct from the Round Pitting phase of Level 8) (**Figure 62**). The purpose of this pit cutting activity is uncertain but it lies stratigraphically between the Uruk and Early Bronze Age pre-fort occupation of the site. A consideration of the nature of the depositions associated with these pits is made difficult by the scale of the disturbance and the evidence that pits were cut into each other. Therefore, they are not the products of strictly synchronous activity but are simply broadly attributable to the same level. Nevertheless, a breakdown of the small finds here serves the present purpose as it highlights the limited character of small find deposition and is useful for comparison in the discussion section below.

A total of 15 small finds can be clearly attributed to this level: 5 are from 'general' layers (including possible surfaces) and 10 from the fills of 4 pits (**Table 67**). The majority of finds (60%) from these fills and general deposits are from the category of textile production, the rest are from the categories of containing (22.3%) and other (26%) (the latter category largely consists of scrapers made from reused sherds) (**Figure 63; Table 81**). There are no finds attributable to the categories of heavy processing, personal ornament, ideology/ritual or storage/administration. In addition, there no distinction between the categories of finds recovered from general layers and those from fills. Pottery artefacts comprise the largest proportion of this assemblage (73.3%), followed by stone (20%) and metal (6.7) (**Table 82**).

Overall, there is a larger proportion of fragmentary (53.3%) as opposed to complete artefacts. Those artefacts associated with the category of containing have the highest fragmentation rate (100%) followed by those associated with textile production (55.6%). The majority of finds were between 2 to 5 and 5 to 10cm in length, no finds smaller than 2cm and larger than 20cm were recovered (**Figure 64; Table 70**). A slight majority of finds were of curated form (53.8%) (**Table 83**). The bulk of these were recovered in a fragmentary condition (78.6%), whereas all the expedient finds were recovered intact.

LEVEL 11

This phase of activity in Area III is associated with the late Uruk occupation of the site (see also Level 12 below). Like a number of later Pre-fort levels, it too is a confused and difficult level to analyse by virtue of the general absence of architectural features in the area or of clear occupation surfaces. Instead, occupation appears to be defined by a series of laminated deposits, ashy lenses, hill-wash and the evidence of pottery dumps. As such, the best interpretation is of an open area that is (probably) on the edge of a settlement (in this respect certain comparisons may be made with some of the unroofed areas of the Sabi Abyad Level 6 settlement; see **section 5.7.1**). The occurrence of finds in this area provides material for comparison with artefactual deposition in the built environment.

A total of 49 objects were recovered from all (non-funerary) contexts attributed to Level 11. Of these, the majority (69.4%) were recovered from 'general' layers that are interpreted as deposits containing multiple external surfaces, the rest are associated with occupation deposits (14.3), surface pot spreads/dumps within occupation deposits (14.3%) or on floors (2%) (**Table 67**).

A particular feature of the Level 11 assemblage is the occurrence of small objects of personal ornament (e.g. beads and pendants), the relative paucity of larger objects (particularly those associated with heavy processing activity) and the occurrence of intact and/or reconstructible pottery vessels from the category of containing equipment (**Figure 65; Table 84**). Artefacts associated with containing constitute the largest proportion of the assemblage (38.8%) followed by those associated with personal ornament (34.7%). The category of textile production, commonly the largest category in other levels has a limited representation in Level 11 (10.2%), as do the categories of heavy processing (6.1%) and storage/administration (2%). The majority of finds are of pottery (46.9%) followed by stone (36.8%) and clay (10.2%) (**Table 85**).

The high proportion of artefacts associated with personal ornament is unusual. Similarly unusual for settlement contexts at the site is the occurrence of complete pottery vessels. The recovery of reconstructible Bevel Rimmed Bowls coupled with the large number of complete beads recovered (the category of personal ornament has the highest proportion of complete artefacts (100%)) has skewed the proportion of complete (71.4%) over broken (28.6%) artefacts. The category with the highest fragmentation rate is that of heavy processing (100%) followed by textile production (60%), containing (31.6%) and other (25%). The majority of finds were less than 2cm or between 2 and 5cm in length. A significant number, however, were between 5 and 10 and 10 and 20cm (**Figure 66; Table 70**). The bulk of this assemblage comprised finds of curated form (69.8%) (**Table 86**). The majority of both curated and expedient finds were recovered complete (75%).

Considered as a whole the variety of finds is unusually great for non-funerary contexts at the site but compares - to a degree - with that seen from external surfaces associated with level 12 occupation.

LEVEL 12

Level 12 is a particularly interesting and important level for wider interpretations of the site being (like Level 11 above) associated with the Uruk phase of occupation (this is most clearly demonstrated by the occurrence of diagnostic Late Uruk Bevel Rimmed Bowls) (**Figure 67**).

Although the area of the exposure was limited, a building (Building 2185) and associated external features (e.g. bin 2196 and 'courtyard' surfaces 2092 and 2192) were identified and a total of 43 artefacts were recovered from these latter contexts (see **Table 67**). The internal area exposed within Building 2185 yielded no small finds, however a single pivot stone was recovered from one wall (possibly a threshold). This distinction between the external and internal areas might be a by-product of the limited nature of the exposure, however it could equally be indicative of different maintenance and abandonment strategies operating for internal and external spaces.

Artefacts from the category of containing are most numerous (50%) followed by the categories of personal ornament (22.7%), textile production (6.8%), heavy processing (9.1%) and other (5%) (**Figure 68**; **Table 87**). For the Level 12 assemblage as a whole, the bulk of recovered artefacts are of pottery (59.1%) followed by stone (36.4%); there is only a limited occurrence of clay and bone artefacts (2.3% each) (**Table 88**).

The overall fragmentation rate for Level 12 finds reveals a significant majority of complete artefacts (75.6%). The category of other has the highest fragmentation rate (100%) followed by heavy processing (75%) and textile production (33.3%). The majority of finds associated with the category of personal ornament are intact (90%). Analysis of the artefacts by their longest dimension reveals that the majority of finds are between 10 to 20 and greater than 20cm in length (**Figure 69; Table 70**). However, a significant proportion of find between less than 2cm and 2 to 5cm were also recovered. The vast majority of finds were of curated form (90.5%) (**Table 89**). Both curated and expedient finds were predominantly recovered in a complete condition.

Two external ('courtyard') surfaces were recorded, namely contexts 2092 and 2192. In the case of the former, a total of 34 small finds were recovered. These finds were from a broad range of categories including containing (62.9%), personal ornament (22.9%), textile production (8.6%), heavy processing (2.9%) and storage/administration (2.9%). With the exception of 3 intact pottery vessels (Bevel Rim Bowls) that were found lying - face up - on the surface the bulk of the containers were recovered from a single pottery spread (2396). Complete artefacts (including the reconstructible vessels) accounted for 76.5% of the assemblage.

By way of contrast with surface 2092, the earlier surface, context 2192, produced a total of only 3 finds, 2 beads and a single pottery spindle whorl. The small number of finds, combined with the fact that the majority of these are small (intact) beads, indicates that the area was generally kept clean of artefacts, and that only small artefacts (e.g. beads) escaped removal during the habitation phase. Also, although a later surface was to overlie this earlier one, there appears to have been no build-up of discarded artefacts in between. In contrast, the last external surface associated with the occupation of Building 2185 saw the apparent deliberate dumping of whole pots presumably in the period of abandonment of this area.

The third context from this level is bin 2196, a feature that is contemporary with surface 2092 and the second phase of occupation of Building 2185. This feature abuts the northern exterior face of the latter and produced 4 small finds, all of stone. Three of these artefacts are associated with the category of heavy processing but only one was broken in antiquity. Clearly, however these finds were reused in the construction of the platform on which the mudbrick walls of the bin were constructed.

LEVEL 13/14

In the same way that Levels 11 and 12 are of importance for understandings of the Late Uruk occupation at the site, Level 13/14 is of great interest as it provides evidence of occupation in the immediately preceding period (**Figure 70**). Thus, it provides a rare glimpse of Local Late Chalcolithic activity. The limited exposure in Area III produced evidence of patchy mudbrick walls, occupation deposits, trampled surfaces and a hearth.

A total of 26 finds were recovered from Level 13/14 contexts (see **Table 67**). Artefacts from the category of personal ornament were most numerous (42.3%) followed by the categories of storage/administration (19.2%), textile production (15.4%), other (15.4%) and containing (7.7%) (**Figure 71**; **Table 90**). The majority of finds are of stone (61.5%), followed by clay (19.2%), pottery (11.6%) and other materials (7.7%) (**Table 91**).

A slight majority of finds were recovered complete (57.7%). The category of storage/administration has the highest fragmentation rate (100%) followed by textile production (75%), containing (50%) and other (50%). All finds from the category of personal ornament were recovered intact. Analysis of this assemblage by size reveals the preponderance of personal ornament, as the clear majority of finds were less than 2cm in their longest dimension and no artefacts greater than 10cm in length were recovered (**Figure 72; Table 70**). The majority of finds were of curated form (77.3%), these were largely recovered in a fragmentary condition whereas all the expedient artefacts were recovered complete (**Table 92**).

AREA III: SUMMARY

The contextual analysis of occupation levels in Area III is naturally limited by the size of the exposure, the degree of disturbance that has occurred in this multiperiod area and by the relatively limited size and character of the assemblages recovered. However, a number of points have been raised that should be highlighted ahead of the analysis of other areas and of the final discussion that will conclude the analysis as a whole.

Of chief interest here are the differences in the patterning of artefactual deposition between levels that are suggestive of some chronological variation in the treatment and deposition of artefacts. For the Level 4 fort occupation, few finds were recovered from rooms and room fills. Of those that were recovered, a significant number came from the building fabric. The majority of these are artefacts associated with the heavy processing category. A significant number of finds, however, were also recovered from drain fills. One of the most common artefacts groups are perforated pottery discs (associated with textile production).

Pre-fort Early Bronze Age Level 7 was poor in terms of the variety and number of finds (despite the presence of architecture). A larger proportion of these were in a fragmentary condition than in Level 4. Level 8 represented a pitting phase of activity in the area, few finds were recovered and the majority of these are associated with the category of textile production. Level 9 was particularly unproductive despite the evidence for some architecture. Most finds were recovered in a fragmentary condition from general contexts (probably multiple episodes of deposition) the exceptions are a rubber from a pavement construction and a perforated disc. Level 10 represented a further pitting phase of activity and also produced few finds that are marked by their lack of variety: the most common category being textile production and containing.

Late Uruk Level 11 was more productive of finds, particularly from general external layers and surfaces. The majority were complete and a notable feature of this level is the occurrence of reconstructible vessels, in particular Bevel Rimmed Bowls. This occurrence has parallels at Uruk occupations at other sites (see, e.g. Nissen 1972: 99). Similarly, the limited exposure of Level 12 that included part of a building and external surfaces also yielded a relatively significant assemblage of small finds including a number of complete Bevel Rimmed Bowls. This suggests a comparable treatment of this artefact category between the two levels. The building, however, was largely devoid of artefacts; although, a number of heavy processing (stone) artefacts had been utilised in the manufacture of a bin feature. Level 13/14 produced an assemblage that were unusual for the predominance of artefacts from the category of personal ornament and for the absence of artefacts associated with the category of heavy processing.

6.6.4 AREA IV

Of all the areas at the site, Area IV represents the largest exposure of the Early Bronze Age fort interior, particularly the later stages of the fort occupation (**Figure 41**). For this reason alone it is of significant importance to any understanding of the use and abandonment of the site during the period that spans the initial habitation stages of the fort through to the last surviving phases of Early Bronze Age occupation at the site. Furthermore, with the exception of the monumental tomb 302 in Area II, Area IV is also the area with the greatest preponderance of excavated funerary remains; these latter will be discussed in a later (see **section 6.6.6** below).

To date a total of eight separate levels of occupation have been identified in Area IV, six of which are of Early Bronze Age date (Levels 2-7) and four of which will be considered in the following analysis. While these levels clearly vary in terms of the original character of the settlement revealed, equally fundamental is the variance that occurs in the area of the exposure of different levels and the condition of the surviving remains. On the whole, Area IV presents some considerable challenges to our efforts to reconstruct the settlement by phase. It also presents a challenge to any effort to isolate contexts of deposition for comparative analysis. Particular difficulties are caused by disturbance from pit and grave cuts, erosion, rebuilding works and by the digging out of phase that has taken place during the process of excavation.

Nevertheless, an analysis of certain key architectural elements in the area is possible with a view to patterning the character of the abandonment and - to a lesser extent - site maintenance procedures that operated within this area. The following analysis will focus on the investigation of the artefactual deposition in Levels 4, 5, 6 and 7 (the latter being associated with the earliest occupation of the fort).

LEVEL 4

Level 4 corresponds to later occupation of the Early Bronze Age fort and has been divided into two sub-phases (4.1 and 4.2) (**Figure 73**). The level is characterised by substantial stone architecture in the southern half of the area. In particular, two features dominate this occupation phase, namely Building 1000 and Passageway 1092. These latter form the principal contexts for analysis here. To the south of passageway there is further evidence of structures and rooms, but these are incomplete due to the limits of the excavation area and the considerable disturbance caused by a large Islamic pit, that cut through a series of occupation levels in Building 2250. In addition, a number of tombs have also been attributed to this level (see **section 6.6.6** below).

A total of 64 finds were recovered from Level 4.1 non-funerary settlement contexts. In terms of their contextual provenance, 18.7% were recovered from 'general' layers with the rest (82.3%) from features (**Table 93**). Only a few finds can be assigned to room fills and floors (7.8%), the majority (71.9%) were recovered from walls, pavements and a bench. Artefacts associated with the category of heavy processing proved most numerous (68.75%), followed by miscellaneous artefacts grouped in the category of 'other' (18.75%). The categories of textile production (9.4%) and containing (3.1%) are also represented, however there are no artefacts associated with storage/administration, personal ornament or ideology/ritual (**Figure 74; Table 94**). The great majority of finds recovered from Level 4.1 are of stone (84.6%) followed by pottery (13.9%) (**Table 95**). This pattern naturally reflects the predominance of the heavy processing category.

The majority of the artefacts are fragmentary (82.8%). The category of heavy processing produced the highest fragmentation rate (95.5%) followed by other (58.3%). The bulk of the Level 4.1 assemblage comprised artefacts of curated form (77.3%) (**Table 96**). Whereas the majority of these were recovered in a fragmentary condition (76.5%), all of the expedient finds were intact.

Level 4.2 proved slightly less productive of small finds yielding a total of 44. With respect to their contextual provenance: 15.9% were recovered from collapse deposits, with the rest (84.1%) from features and fills (**Table 93**). Room fills and floors represent 22.7% of this assemblage, whereas the majority (61.4%) were recovered from wall fabric.

As in the case of Level 4.1, artefacts associated with the category of heavy processing proved most numerous (70.5%) in Level 4.2, followed by miscellaneous artefacts grouped in the category of 'other' (13.7%) (**Figure 75; Table 97**). The categories of personal ornament (6.8%), textile production (4.5%) and containing (4.5%) are also represented, however there are no artefacts associated with storage/administration or ideology/ritual. The majority of these finds are of stone (84.1%), followed by pottery (9.1%) and metal (4.5%) (**Table 98**).

The proportion of fragmentary artefacts is lower for this phase than for Level 4.1, but nevertheless the majority of artefacts are broken (68.2%). The category of containing reveals the highest fragmentation rate (100%) followed by heavy processing (80.6%), personal ornament and other (16.7%). A large majority of these artefacts were of curated form (84.1%), the bulk of which were recovered in fragmentary condition (83.8%) (**Table 99**). By contrast all of the expedient finds were recovered intact.

Considered together, analysis by largest dimension reveals that the bulk of finds from both phases of Level 4 are between 10 and 20 and over 20cm in length, very few are less than 5cm (**Figure 76; Table 100**). Clearly, this reflects the occurrence of larger stone artefacts associated with the category of heavy processing and other (e.g. pivot stones).

Of the various structural contexts from Level 4, Building 1000 is of special interest here, particularly given the nature of its construction and the evidence that the building produced for grain processing activity. The structure is but partially preserved because its northern extent has been lost to erosion (see **Figure 73**), however enough survives of its southern portion to allow interpretations to be made regarding the nature of artefactual deposition and of the abandonment of structures during this phase. The excavator identified both Level 4.1 and 4.2; these are distinguished by architectural changes. During both phases the building was constructed of an admixture of stone walls and walls with stone foundations and mudbrick superstructures. The construction of the former marks a significant departure from construction practices seen in earlier architectural levels at the site, which saw the construction of mudbrick walls and - more rarely - mudbrick walls with stone foundations. The floors associated with this Building 1000 consist of compacted mud. Ashy deposits associated with habitation are recorded as being excavated from above these surfaces.

Artefactually, Building 1000 represents one of the most productive architectural features on the site producing a total of 49 finds (from both phases). However, materially and qualitatively the assemblage is limited. The majority of registered finds are from the category of heavy processing (mainly querns and rubbers); many pivot stones (considered under the category of other) were also recovered (**Table 101**). Of these finds only a few (14%) can be allocated to floor or near floor deposits; fewer still can be placed clearly in an *in situ* location of use. Examples of the latter, include the two pivot stones that were found placed at the jambs of two doorways, one off the passage way to the south of Building 1000 and the other into a cupboard area within Building 1000. The majority of finds (74.4%) come from the fabric of the walls. Analysis of the Building 1000 assemblage by condition reveals that most artefacts are fragmentary (76.6%). It is worthwhile noting that the percentage of fragmentary artefacts is even higher for querns and rubbers alone (86.7% and 92.9% respectively).

A similar pattern as that seen in Building 1000 is presented by passageway 1092. Bounded to the north by Building 1000 and by a stone wall (1093 and 1665) to the south, this feature runs east-west, providing access to and between structures. Some 17 artefacts were recovered from the passageway, 16 belonging to the category of heavy processing (all querns and rubbers) and the remaining find (a pivot stone) from the category of other. All finds, with the exception of the latter, were recovered in a fragmentary/worn condition; the majority were reused as paving stones in the passage floor. A further 11 artefacts were also recovered during the removal of the wall 1093/1665 that formed the northern boundary of passageway. Again this small group largely comprises heavy processing equipment (e.g. querns and rubbers) and complete pivot stones.

LEVEL 5

Level 5 is characterised by a series of rooms, passageways and drains. The former are less substantial than those of Level 4 and generally consist of stone-founded mudbrick walls. Level 5 has been subdivided into three phases of activity, namely: 5.1, 5.2 and 5.3 (see **Figure 77**).

The first phase of occupation, Level 5.1, yielded a total of 37 small finds. With regard to their contextual provenance, 13.5% was recovered from general layers, feature fills (mainly in passageway 2629 and drain 2953) produced 56.8% of the assemblage and the rest (29.7%) were recovered from walls (**Table 93**). Artefacts associated with the category of textile production are most numerous (43.2%), followed by heavy processing miscellaneous artefacts (27%) (**Figure 78**; **Table 102**). The categories of personal ornament (13.5%), other (13.5%) and containing (2.7%) are also represented, however there are no artefacts associated with storage/administration or ideology/ritual. The majority of finds are of pottery (48.5%), followed by stone (37.8%) metal (10.8%) and bone (2.7%) (**Table 103**). This pattern reflects the high proportion of artefacts associated with the category of textile production.

A slim majority of the artefacts are complete (51.4%) rather than broken (48.6%). The category of containing has the highest fragmentation rate (100%), followed by the categories of personal ornament (60%), heavy processing (60%), other (40%) and textile production (37.5%). The bulk of these artefacts are of curated form (85.7%) (**Table 104**). A slight majority were recovered in a fragmentary condition (53.3%), whereas the majority of expedient finds were recovered intact (60%).

Passageway 2629 (including the walls that bound it as well as the fills and drain contained therein) produced most of the finds attributed to this earliest phase of Level 5, yielding a 19 artefacts (51.4% of the total). Of these, 14 were recovered from fills and the rest were recovered from a wall. The majority of the latter are associated with the category of heavy processing. The former largely comprised artefacts associated with the category of textile production (64.3%) and personal ornament (28.6%). In addition, drain 2953 that ran through the passageway produced 6 small finds, comprising 4 perforated pottery discs (textile production), a single bead (personal ornament) and an unidentifiable fragment of metal (other).

The second phase of Level 5 occupation (5.2) yielded a total of 44 small finds. Of this assemblage 18.2% of artefacts were recovered from general layers (**Table 93**). Features and fills (mainly in passageway 2632 and room 2436) produced 78.3% of the assemblage; the rest of the assemblage (4.5%) was recovered from walls. Artefacts associated with the category of textile production are most numerous (52.3%), followed by heavy processing artefacts (15.9%) (**Figure 79**; **Table 105**). The categories of storage/administration (6.8%), personal ornament (6.8%), containing (4.5%), ideology/ritual (2.3%) and other (11.4%) are also represented. Given the high proportion of artefacts from the category of textile production it is unsurprising that the bulk of the assemblage comprised pottery artefacts (61.4%), followed by those of stone (31.8%), clay (4.5%) and metal (2.3%) (**Table 106**).

The Level 5.2 assemblage largely comprises broken artefacts (63.6%). Those artefacts associated with the category of ideology/ritual revealed the highest fragmentation rate (100%), followed by the categories of textile production (69.6%), other (60%), heavy processing (57.1%) and containing (50%). A large majority of the assemblage is of curated form (84.4%) (**Table 107**). Most of these were recovered in fragmentary condition (65.8%), whereas a slight majority of expedient finds were recovered intact (57.1%).

Passageway (2632), in particular drain 2386 (and fill 2387) associated with this passageway, produced the bulk of the finds for this phase yielding a total of 29 artefacts (65.9% of the total). The majority of these (62.1%) were recovered from the fill of drain 2386 and the fill and floor of the passageway (31%); one find was recovered from a bench feature. Artefacts associated with the category of textile production (mainly perforated pottery discs) proved the most numerous (58.1%), followed by the categories of personal ornament (9.7%), heavy processing (9.7%), other (9.7%), storage/administration (6.5%) and containing (6.5%). The qualitative variety of artefact types compares well with that from the earlier passageway (2629) and drain (2953) (see above), and includes artefacts associated with the categories of ornament (e.g. beads) and heavy processing equipment. However, there is an overwhelming majority of perforated discs (textile production) from the contexts associated with this level, the bulk of which are fragmentary. This latter point has naturally impacted on the overall fragmentation rate for finds within this context and bears similarity to the pattern of earlier passageway fills. Unlike the latter however, the fragmentation rate of the artefacts is higher, as the majority of artefacts were broken (67.7%) rather than complete (32.3%). In contrast to these passageways and drains, Room 2436 produced single finds belonging to the categories of personal ornament and textile production.

The final phase of Level 5 occupation (5.3) yielded only 19 small finds. Of this assemblage 26.3% of artefacts were recovered from general layers, only 10.5% of the assemblage came from feature fills (mainly passageway 2628) and the rest were recovered from a stone pavement (42.1%), a hearth (10.5%), a bench (5.3%) and from the fabric of the walls (10.5%) (**Table 93**). Artefacts associated with the category of heavy processing were most numerous (63.2%), followed by textile production (10.5%), personal ornament (10.5%), other (10.5%) and ideology/ritual (5.3%) (**Figure 80**; **Table 108**). The category of containing is not represented. Mirroring the occurrence of heavy processing and textile production, the majority of artefacts are of stone (68.9%), followed by pottery (21.1%) (**Table 109**).

More than two-thirds of the Level 5.3 assemblage is fragmentary (68.4%). The categories of other and containing have the highest fragmentation rates (100% each) followed by heavy processing (75%) and textile production. All of the classifiable artefacts recovered are of curated form, the majority of which are fragmentary (62.5%) (**Table 110**).

Passageway 2628 proved the most productive feature yielding a total of 11 artefacts (57.9% of the total). The majority of these (63.6%) were recovered from the stone pavement of the passageway and a hearth construction (18.2%); only two finds were recovered from the fill (18.2%). The majority of artefacts belong to the category of heavy processing (72.7%), all had been reused in the pavement and hearth construction. A single bead (9.1%) and figurine (9.1%) were recovered from the fill. The majority of artefacts are broken (72.7%) rather than complete (27.3%). Room 2466 produced no finds from its fill, only 2 heavy processing artefacts were recovered from one wall.

Analysis of the total level 5 assemblage by longest dimension reveals that the clear majority of finds are between 2 to 5 and 5 to 10cm (**Figure 81; Table 100**). The predominance of smaller finds reflects the occurrence of artefacts from the categories of personal ornament and textile production.

LEVEL 6

Level 6 is characterised by a number of (external) surfaces lying under Level 5 passageways that extend to the south (**Figure 82**). To the north of these surfaces are a number of rooms. Unfortunately, this level was considerably disturbed by later (Islamic) pits.

A total of 48 small finds were recovered from this level; 20.8% came from general layers, feature fills and floors (mainly from pits 2474, 2536, 2539 and 2672 and Room 2122) produced 50% of the assemblage and the rest were recovered from a stone pavement (12.5%) and walls (16.7%) (**Table 93**). Artefacts associated with textile production are most numerous (35.4%) followed by heavy processing artefacts (31.25%), other (18.75%), storage/administration (8.3%), ideology/ritual (4.2%) and personal ornament (2.1%) (**Figure 83**; **Table 111**). Small finds associated with containing are not present. The majority of these finds are of pottery (50%), followed by stone (41.7%) and clay (6.2%) (**Table 112**).

A majority of the artefacts are broken (58.3%). The categories of storage/administration and ideology/ritual have the highest fragmentation rates (100%) followed by the categories of heavy processing (93.3%), other (44.4%) and textile production (23.5%). The single artefact from the category of personal ornament was complete. The bulk of this assemblage comprised curated forms (88.4%) (**Table 113**). A slim majority of the latter are complete (57.9%) whereas the majority of expedient finds are fragmentary (60%).

Analysis of the level 6 assemblage by largest dimension reveals that the clear majority of finds are between 5 to 10 and 10 to 20cm in length (**Figure 84; Table 100**).

Room 2122 proved the most productive of the architectural features from Level 6, yielding a total of 18 small finds. The majority of this assemblage (72.2%) came from pavement and wall contexts. All of the latter comprise heavy processing artefacts (exclusively querns and rubbers), most of which are fragmentary (77.8%). Of the 5 finds recovered from the fill and floor of Room 2122, 3 are perforated discs (textile production); the others comprised a seal impression (storage/administration) and a miscellaneous object (other).

LEVEL 7

Level 7 is particularly characterised by a number of drains and passageways running east-west that are associated with structures to the north and south of the area (**Figure 85**). Three distinct phases of activity have been identified. The most productive features were room 2971 and passageway/drain 3135.

The first phase of occupation (7.1) produced a total of 29 artefacts. Of these, 13.8% were recovered from general layers (**Table 93**). Of the rest, 66.5% came from fill and floor contexts, while 20.7% were recovered from the fabric of walls. The bulk of the assemblage comprises artefacts from the category of other (38%), followed by heavy processing (27.6%), textile production (24.1%), containing (6.9%) and personal ornament (3.4%) (**Figure 86**; **Table 114**). There were no artefacts recovered from the categories of storage/administration and ideology/ritual. Stone artefacts account for 69% of the total, pottery artefacts for 31% (**Table 115**).

A majority of artefacts were complete (62.1%). The category of personal ornament reveals the highest fragmentation rate (100%) followed by heavy processing (87.5%), containing (50%) and textile production (42.9%). The majority of finds are of curated form (88.4%) (**Table 116**). Most of these were recovered in a fragmentary condition (61.1%), whereas the majority of expedient finds were recovered complete (77.8%).

Investigation by feature reveals that Room 2971 was the most productive yielding a total of 17 artefacts; with the exception of one find from the floor, all came from the room fill. The majority of this assemblage comprised large stone artefacts associated with heavy processing and other, including a significant number of pivot stones (47.1%). Passageway/drain 3135 also proved relatively productive yielding 10 artefacts associated with textile production, containing and personal ornament.

The second phase, 7.2, produced a total of 18 artefacts from fills (61.1%), floors (11.1%) and the fabric of structures (27.8%). The majority of these finds are from the categories of heavy processing (27.8%) and other (27.8%), followed by textile production (22.2%), containing (11.1%), storage/administration (5.6%) and weaponry (5.6%) (**Figure 87**; **Table 117**). The latter is unusual; normally associated with graves, it is probable that this find is a testament to post-depositional disturbance. There were no artefacts recovered from the categories of personal ornament and ideology/ritual.

A slim majority of the assemblage comprises pottery artefacts (50%), followed by stone (44.4%). There is also a single occurrence of a metal artefact (5.6%) (**Table 118**). Most of these finds were recovered complete (66.7%). Those artefacts associated with the category of storage/administration (100%) have the highest fragmentation rates followed by heavy processing and other (80% each).

The majority of Level 7.2 finds that could be classified in terms of their curation are of curated form (76.5%) (**Table 119**). Most of these were recovered complete (61.1%), whereas expedient finds were recovered in equal proportions of complete versus fragmentary.

The final phase, 7.3, produced a total of 20 artefacts. Of these 5% were from general layers, the rest were from the pit fills (20%), and the fills (65%) and fabric of structures (10%) (**Table 93**). The clear majority of these are from the category of textile production (50%) followed by other (20%), heavy processing (15%), personal ornament (5%), containing (5%) and ideology/ritual (5%)

(**Figure 88**; **Table 120**). There were no artefacts recovered from the categories of storage/administration and weaponry. In keeping with the patterns for broad function, a majority of the finds are of pottery (50%), followed by stone (40%); there are only single occurrences of a metal and bone artefact (5% each) (**Table 121**).

A slight majority of the artefacts are complete (55%). Those artefacts that are associated with the categories of personal ornament and ideology/ritual reveal the highest fragmentation rates (100% each), followed by the categories of heavy processing (66.7%), other (50%) and textile production (30%). It should be noted however that the first two are least well represented, more significant is the proportion of complete versus fragmentary artefacts from the latter category.

The bulk of Level 7.3 finds comprise curated forms (77.8%) (**Table 122**). A slight majority of these were recovered complete (57.1%), whereas a larger majority of expedient finds were recovered complete (75%).

Analysis of the total level 7 assemblage by largest dimension reveals that the clear majority of finds are between 5 to 10 and 10 to 20cm in length; very few are less than 2cm in length (**Figure 89; Table 100**).

AREA IV: SUMMARY

Ahead of a wider discussion involving other areas it is useful to summarise the characteristics of artefactual deposition within Area IV by level. With regard to Level 4 it is most notable that the majority of artefacts (presumably defunct) were recovered from walls and pavements. The assemblage is limited in terms of variety and the bulk of finds are associated with the category of heavy processing.

In general terms, the small find assemblage from Level 5 is broadly comparable to that from the later Level 4. This is particularly true for Level 5.3. Artefactually, however, there is some greater variety of type and material than found in Level 4, with the occurrence of artefacts associated with textile production and personal ornament. Heavy processing artefacts are less common than in other levels. Yet, despite the variety of features and the implied multi-phased character of this level, the small find assemblage from levels 5.1 and 5.2 is limited. Furthermore, the majority of the finds were recovered from the fills of passageways and drains and from walls, not from the rooms themselves.

In contrast to the other levels analysed from Area IV, a considerable proportion of the Level 6 assemblage was recovered from pit fills and general (external?) layers. However, in keeping with a pattern seen in the other levels significant proportions were also recovered from constructional contexts and very few finds were found on floors.

Artefactual deposition in Level 7 bears some similarity to that in Level 5, particularly with the occurrence of significant numbers of finds in passageways and drains; only a limited number and range were recovered from room fills. A large proportion of the artefacts recovered from such contexts comprised artefacts associated with the category of textile production (in particular perforated discs).

6.6.5 FUNERARY CONTEXTS

Analysis of funerary contexts from Jerablus Tahtani is intended to illustrate the contrast between the artefactual deposition in tombs as opposed to that within the structures and other features of the built environment. In particular, this analysis will focus on aspects obtaining to the wealth, abundance and variety of these assemblages.

A brief consideration, will also be given to the evidence of repeated reuse of these tombs (as new burials were placed within their confines) and to the ramifications this reuse has for establishing social practices and attitudes to artefactual deposition that are entwined with attitudes towards the dead. In this way, it will be demonstrated that artefacts can play a number of roles outside their form and apparent every-day function and that their variety of meanings both symbolic and practical can be understood better by the investigation of the variety of different locations and contexts of their deposition. In particular, burials provide the most direct access to individuals and also afford interpretations of social relations operating within the period of the Early Bronze Age settlement of Jerablus. On a cautionary note, it should be recognised that the mortuary record presents only an idealised view of social relations and not necessarily an exact reflection (see, e.g. Parker Pearson 1982; McGuire 1988). It would be a mistake to follow in the footsteps of early mortuary studies (e.g. Binford 1971; Saxe 1970) founded on the principles of cultural evolution that had greater faith in the ability to gain direct insights into social organisation through the funerary record.

The full funerary assemblage is not considered here however; instead, selection has been made of tombs from Area IV (**Figure 90** and **91**). Most notably, perhaps, this analysis does not consider the monumental Tomb 302 located in Area II which would have proved a considerable and difficult undertaking given its size, the quantity of finds recovered and its multiphase nature. Nevertheless, Area IV has proved the most productive of tomb units and this in combination with the preceding analysis (see above) of other features and levels within the area provides ample material for present purposes. The tombs are analysed according to their level but it should be noted that the definitive stratigraphic phasing has yet to be completed. Levels 4, 5 and 6 all have tombs assigned to them, each will be considered separately.

LEVEL 4

Level 4 produced the number of the tombs (11 in total), many of which appear to date to the end of this phase. These tombs are of varying form and include cist, pithos and 'chamber' burials. Most yielded human remains and grave goods, the exceptions with respect to the latter are 1526 (added to 1518) and 1836.

A total of 267 registered finds are recorded from the Level 4 tombs analysed here (**Table**

123). The largest category is that of personal ornament followed by containing. However, the numerical superiority of the former is naturally a reflection of the counts of individual beads that were originally strung together as bracelets or necklaces. In addition to these abundantly represented categories, there are low occurrences of artefacts associated with the categories of weaponry, ideology/ritual and other. All of the latter finds were recovered from tomb 1036.

LEVEL 5

Level 5 produced the majority of the tombs analysed here (14 in total). As with Level 4 (above) many possibly date to the end of this phase. The tombs are of varying form and include cist, pithos and 'chamber' burials. Most yielded human remains and grave goods, the exceptions with respect to the latter are 1320, 1342, 1575 and 1709. The occupation level of the latter is unclear; thus it as been ascribed to Level 5/6.

A total of 267 registered finds are recorded (**Table 124**). By far the largest single category is that of personal ornament followed by containing. However, as noted above, the numerical superiority of the former is naturally a reflection of the counts of individual beads that were originally strung together as bracelets or necklaces. There are low occurrences of artefacts associated with the categories of weaponry, heavy processing, cutting tools, textile production and other. The majority of these are from the large stone built Tomb 787.

The latter (Tomb 787) is one of the most productive and substantial tombs considered here. It is also notable for its location below Building 1000. It is possible that it was used during the lifetime of this structure but given the lack of secure stratigraphical evidence it is equally possible that the tomb predates Building 1000 and therefore represents an act of 'extramural' burial on an unoccupied part of the mound following Level 5 occupations and prior to the later Level 4 occupations. Such use of settlement mounds has been recognised elsewhere (e.g. Matney et al. 1997). Also of interest is the evidence of a 'robber' trench at the southern end of this structure. This is reminiscent of similar observations made for Late Early Bronze Age tombs at Titris Höyük, where interpretation suggests that the chamber was deliberately disturbed and infilled with 'trash' prior to rebuilding in order to allow sounder foundations for a new building (Matney et al. 1997: 67).

LEVEL 6

Only three tombs assigned to Level 6 are considered here and of these only one yielded grave finds: a total of 8 (**Table 125**). Of the others (both cist burials), only one produced skeletal remains. The finds from tomb 1885 included artefacts associated with the categories of personal ornament, heavy processing and containing.

FUNERARY CONTEXTS: SUMMARY

There are a number of patterns discernible in the graves of Area IV and the character of their associated grave depositions. Many graves can be assigned to phases that correspond to periods when the area had ceased to be used for habitation (whether for residential or for more specialised industrial or other functions). Thus, a number of graves appear to have been cut at the end of the Level 5 occupation and later at the end of the Level 4 occupation. For example, for the southern part of Area IV Level 4 the excavator records 4 phases beginning with the construction of Room 2188 (see above), followed by two later phases of construction of rooms one above the other following the same wall alignment to the first (Rooms 1870 and 1775), the final phase is seen as a burial phase. This latter phase saw the cessation of habitation and the construction of substantial tombs such as 1670, 1518, 1850 and 1687, some of which cut into the walls of the earlier structures and reused the wall stones in the tomb construction. The fact that there should be a shift in the use of this part of the settlement towards the end of more than one occupation phase suggests some continuity in funerary practice.

In general, those interments that yield grave goods produce artefacts associated with personal ornament and/or containing. The latter includes those artefacts that were used as containers of the dead (often infants and children). Few graves contain other materials, although rare exceptions to this rule have produced artefacts associated with the categories of weaponry, heavy processing, cutting tools, textile production, ideology/ritual and other. The inclusion of artefacts associated with heavy processing may be explained by the stone construction of certain tombs (see Tomb 787 above). This reuse of artefacts follows the pattern seen in a number of other structural contexts. The inclusion of artefacts associated with textile production is more unexpected but perhaps related to the disturbance that has occurred to the particular grave in question (above). The other categories might be related to status or other concerns.

A further feature of the graves that is not of specific concern here is the overwhelming predominance of infants, children and sub-adults in the assemblage. However, given that the various specialist analyses of the funerary assemblages have yet to be completed, it is not possible to determine whether this is an honest reflection of differential treatment of individuals along age lines or simply a natural product of high mortality rates amongst the young.

6.6.6 COMPARISONS: PATTERNING SIMILARITIES AND DIFFERENCES BETWEEN CONTEXTS

There are considerable similarities and differences to be noted in the patterning of artefact deposition at Jerablus. These exist between rooms within the same structures, between different structures and between structures and other contexts (e.g. pits and graves) both within and across differing areas and phases of occupation.

These similarities and differences are outlined below in four sections that summarise and compare results between assemblages in terms of broad functional categories, condition, size and curation.

Broad Functional Categories

Comparison of small find assemblages from the areas and levels analysed above reveals a number of similarities and differences in terms of the occurrence of the various broad functional categories (see **Tables 57, 67** and **93**).

Taking Area I first, the category of storage/administration has a limited occurrence in the Level 4.2 assemblage only. The category of personal ornament occurs in all levels analysed and constitutes an unusually large proportion of the level 4.2 assemblage. Heavy processing artefacts have a limited occurrence in those levels analysed. Artefacts associated with the category of textile production comprise the largest proportion of each of the level assemblages. The category of containing is not represented in the Level 4.2 assemblage. Those artefacts that are associated with the category of ideology/ritual have a limited occurrence in all the assemblages.

In Area III, the category of storage/administration has a very limited occurrence. In many levels this category is absent and only present in a few levels (e.g. Levels 4, 11 and 13). The category of personal ornament has a wider occurrence, appearing in all levels with the exception of 7 and 10. This category constitutes a particularly large proportion of the assemblages of levels 11 through to 13. The category of heavy processing commonly occurs but is absent from Levels 10 and 13 and has unusually low occurrences in levels 8 and 11. Artefacts from the category of textile production are also common, constituting the most numerous category in Levels 8, 9, 10. The category of containing is relatively common and features as the largest single category in levels 7, 11 and 12. Artefacts associated with the category of ideology/ritual are only present in the Level 4 assemblage. The category of miscellaneous other is high for levels 4 and 7: in the case of the former, this reflects the significant number of unidentifiable clay artefacts recovered.

In Area IV slightly different patterns may be seen. Artefacts associated with the category of storage/administration have only a rare occurrence (e.g. in Levels 5.2, 6 and 7.2). The category of personal ornament is absent from the Level 4.1 and 7.2 assemblages. The category of heavy processing widely occurs and comprises the largest proportion of recovered artefacts from Levels 4.1, 4.2, 5.3 and 7.2. Artefacts associated with the category of textile production are similarly widespread figuring as the largest single category in Levels 5.1, 5.2 and 6. This category also has a significant occurrence on Levels 7.1 and 7.2. The category of containing is absent for Levels 5.3 and 6 and has only a limited occurrence in the other levels. Artefacts from the category of ideology/ritual also have a very limited occurrence and are absent in the assemblages from Levels 4.1, 4.2, 5.1, 7.1 and 7.2.

Using the Robinson coefficient of similarity, a number of patterns can be discerned between assemblages analysed above (**Table 126**). These are outlined here in the same sequence as the analyses presented above. First patterns within areas are established and then patterns between areas. Area I is not considered separately given the limited number of levels considered, all of which show some degree of similarity to each other in terms of their composition.

Comparison between levels within Area III indicate that the strongest degree of similarity exists between the level 11 and 12 assemblages, followed by the Level 4 and levels 8 and 9 assemblages. The most marked dissimilarity is found between levels 10 and 12, followed by levels 9 and 11, Levels 8 and 11 and Levels 8 and 12. Levels 4 and 11, 4 and 12, 10 and 11 and 12 and 13 also show marked dissimilarity.

Within Area IV the greatest similarity exists between levels 4.1 and 4.2, followed by levels 4.2 and 5.3, 4.1 and 5.3, 6 and 7, 5.1 and 7 and 5.1 and 5.2. The greatest dissimilarity is found between levels 4.2 and 5.2, 4.1 and 5.2, 4.2 and 7 and 5.2 and 5.3.

When compared with levels analysed from the other two areas, Area I reveals strongest similarity between its Level 5, Area IV, Level 5.2 and Area III, Level 9. There also exists a strong similarity between Area I, Level 4.1 and Area III, Levels 8 and 10 and between Area I, 4.2 and Area III Level 4.2. Greatest dissimilarity exist between Area I, Level 4.1, Area III, Levels 11 and 13/14 and Area IV, Levels 4.1 and 4.2. Area I, Level 4.2 shows a marked dissimilarity to Area IV, Levels 4.1. and 4.2. Area I, Level 5 is also markedly dissimilar from Area III, Levels 11-13/4 and Area IV, Levels 4.1 and 4.2.

A comparison of Area III with Area IV indicates that the strongest degree of similarity is to be found between Area III level 9 and Area IV Levels 5.1 and 5.2, and between Area III, Levels 4, 7 and 8 and Area IV, Level 7. The greatest degree of dissimilarity exists between Area IV, Levels 4.1 and 4.2 and all Levels in Area III. Most notably Area III, Levels 11, 12 and 13/14 (e.g. the principal Late Chalcolithic occupations at the site) show a marked dissimilarity from all Area IV Levels.

The character of the funerary assemblage (that is considered in **section 6.6.6**) naturally presents considerable differences to those recovered from the settlement contexts. In particular these assemblages are notable for their preponderance of complete artefacts associated with the categories of personal ornament and containing. Few occupation contexts or levels produce these categories in significant proportions; the exceptions are Area III Levels 11 and 12 (Level 13 also produced a high proportion of artefacts from the category of personal ornament). However, the reuse of artefacts in the construction of built tombs follows the pattern seen in their reuse in the walls of other structures (especially during the fort occupations).

Condition

At the intrasite level there is considerable variability in the rate of fragmentation of assemblages. For many levels a significant proportion of the artefacts recovered are fragmentary (e.g. levels 4, 4R and 5 in Area I, levels 7, 9 and 10 in Area III and levels 4.1, 4.2, 5.2, 5.3, 6 and 7.2 in Area IV), however a number of levels have produced larger proportions of complete artefacts (e.g. levels 4, 8, 11, 12 and 13 in Area III and levels 5.1 and 7.1 in Area IV). This patterning can in part be related to the artefactual categories and materials recovered. The grave assemblages produced overwhelming proportions of complete artefacts.

Consideration of fragmentation in conjunction with broad functional category demonstrates some general patterning across the site. Artefacts associated with the category of heavy processing, for example, are commonly recovered in a fragmentary state; those assemblages with a particularly high occurrence of this category (e.g. 4.1 and 4.2 in Area IV) are skewed accordingly. By way of contrast the opposite situation is generally true for artefacts associated with the categories of personal ornament and textile production (largely perforated pottery discs and bobbins), whereby they are both more likely to be recovered complete (albeit often worn through use in the case of the latter). The remarkable completeness of pottery vessels in pre-fort contexts of Area III (levels 11 and 12) is also worthy of particular note as it is commonly the case that during later (fort) occupation such artefacts are found in a more fragmentary condition.

Size

A comparison of the proportions of artefacts by their size across the levels within and between the various areas analysed above, reveals limited patterning that correlates in large part with the composition of their assemblages. Little can be said concerning the differences or similarities between the Area I levels. For Area III, the clearest differences can be seen between levels 4, 7 and 8 and the earlier occupations of levels 9 through to 13/14. Levels 9 and 10 lack artefacts of less than 2cm and more than 20cm in length. Levels 11 and 13/14 notably have high occurrences of smaller artefacts of less than 2cm in length; the result of a significant proportion of smaller artefacts associated with the category of personal ornament. Level 13/14 is also unusual for producing no artefacts of greater than 10cm in length. Level 12 has an uncommonly large proportion of artefacts over 10cm and 20cm in length this directly correlates with the occurrence of reconstructible vessels from the category of containing. Area IV reveals clear differences between level 4 assemblages and the other levels with its large proportions of artefacts over 10cm and 20cm in length. This correlates with the predominance of larger items associated with the category of heavy processing and – to a lesser extent – other (e.g. pivot stones). Level 5 most clearly differs from levels 4, 6 and 7, with a majority of artefacts being less than 10cm in length.

Curation and expediency

Following the criteria set out in **section 4.3.3**, the bulk of the assemblages analysed above are comprised of curated artefacts. Comparison across levels reveals that in many cases curated artefacts make up over three quarters of the assemblages. The main exception is found in Area I, Level 5, where expedient forms are in the majority. Level 8 and 11 in Area III and Level 7.1 in Area IV where curated forms still comprise the majority but in smaller proportions also present slight exceptions.

More variation can be seen across assemblages in terms of the condition of curated versus expedient finds. In a number of levels the majority of curated artefacts were recovered in a fragmentary condition and, conversely, the majority of expedient forms were recovered complete (e.g.

Level 4 and 5 in Area I, Levels 7, 10 and 13 in Area III and Levels 4.2, 5.1, 5.2, 5.3 and 7.1).

For certain others the majority of both curated and expedient artefacts were recovered intact (e.g. Levels 4 11 and 13 in Area III). Of the latter, Levels 11 and 12 have particularly high ratios for complete to fragmentary artefacts, which is a direct reflection of the occurrence of intact (or reconstructible) artefacts from the category of personal ornament and containing (see above). Only in the case of Area IV Level 4.1 are both curated and expedient forms largely fragmentary.

6.7 THE CHARACTERISATION OF ARTEFACTUAL DEPOSITION IN, AND ABANDONMENT OF, SPACE AT TELL JERABLUS TAHTANI

Following the comparative contextual analysis of registered artefacts from a series of levels and areas of excavation at the site of Jerablus Tahtani a number of points have been raised that require further discussion. This section presents a discussion of artefactual deposition at Jerablus for the three key periods of the Uruk, Pre-fort Early Bronze Age and the Early Bronze Age fort occupation. However, given the limited extent of the excavations of the first two periods, the bulk of discussion will focus on the character of artefactual deposition and abandonment of space within the dense built environment of the Early Bronze Age fort occupations.

As noted above, the extent of the exposure of pre-fort Early Bronze Age and Uruk activity at the site was limited, confined as it was to the western end of Area III (see above; **Figure 41**). As a consequence few robust conclusions can be drawn regarding the character of site maintenance strategies and abandonment behaviour during these periods; certainly, there is little material to support settlement wide reconstructions. Nevertheless, changes in the character of occupation in this area from Local Late Chalcolithic/Uruk levels through to Early Bronze Age fort occupation present some intriguing observations.

The first observation regards the difference between both the Late Uruk levels 11 and 12 and the later pre-fort levels. In particular, the occurrence of pottery dumps on external surfaces is in stark contrast to the patterns of deposition that are witnessed during later periods of occupation at the site. Such a difference is suggestive of different attitudes to particular artefact classes and different abandonment strategies. Second, notable parallels between these phases of occupation can also be discerned. For example, the surviving structures from Levels 11 and 12 produced few finds implying that the rooms were clean at the time of abandonment, as is the case with later occupations at the site. Those finds that were recovered were largely re-used as constructional material or placed as fixed installations (e.g. pivot stones). This suggests that there are similarities with later levels (see, e.g. Building 1000 in Area IV) and that therefore there are no straightforward distinctions to be made in terms of discard and abandonment practices. Third, the pitting activity in this area during Levels 8 and 10 illustrates the radical changes in use that areas of the settlement underwent even during the pre-fort period, but afford little material on which to base interpretations of the purpose of these pits and maintenance strategies employed by past inhabitants during these phases of occupation. Although, ecofactual evidence is not available at present, the artefactual evidence in combination with excavation records does not indicate that these features served as middens; it is possible that they functioned as quarries for material or as storage pits. Fourth, the occupational horizon immediately preceding the fort foundation produced architectural contexts that were also relatively clear of finds; subsequently, they reflect – to some degree – the pattern of artefact deposition witnessed in the majority of structures from the later fort occupation.

For all phases of the Early Bronze Age fort occupation, the patterns in the occurrence of the finds - particularly in terms of their variety and quality - seem to be closely linked to the nature and character of the context from which they are recovered. An immediate observation to be made regarding the nature of the architectural features and the deposition of artefacts within features from this broad period of activity, is the overall paucity of the small find assemblage given the size of the exposure, the depth of deposits excavated and the large number of discrete structural features identified. This paucity is in stark contrast to the funerary evidence from the site and necessarily impacts on the reconstruction of the use of space within the fort area. From this patterning a number of conclusions can be drawn concerning the treatment of used and abandoned space within the Early Bronze Age fort.

First, as a general observation, it is apparent that in the majority of structures (regardless of their level), few small finds occur on floors or in their fills. In those structures where there is a higher occurrence of finds (e.g. 1569) these tend to either be found in fragmentary condition or comprise certain artefact types (e.g. perforated discs). Altogether, few structures produced categorical evidence of the intentional deposition of finds during habitation and many structures produced no small finds from the surfaces of their floors or in the very lowest of their fills above the floor. Broadly speaking, the exceptions to the rule are a number of pivot stones that were left as fixed installations and that, consequently, might be considered in a different light to the majority of portable artefacts. From such observations, it is possible to further infer that the floors of rooms and passageways (except where they incorporate reused artefacts as paving) were kept clear of artefacts during the habitation stage (for comparable observations on a site of broadly similar date see, e.g. Titris Höyük (Matney et al. 1997: 65)). This maintenance of inhabited space might be seen by the fact that not only are the larger artefacts (that might, according to conventional interpretations, represent obstructions to everyday life) removed but also small artefacts such as beads were not recovered from the rooms and internal spaces. This is a pattern that cannot be simply explained by the failure to employ adequate sieving or sampling strategies, for small items such as beads were recovered from other non-funerary contexts at the site. Given the limited number of small finds it can be inferred that it was not the practice of the ancient inhabitants to leave artefacts within structural contexts at or after their abandonment (this is in contrast with prehistoric contexts from Sabi Abyad (e.g. Building 2) and from Mylouthkia (e.g. Building 200)).

Second, there is no clear evidence of the operation of refuse strategies that involved the deposition of defunct small finds within abandoned structures or elsewhere in the built-environment of the settlement (whether as provisional, primary or secondary refuse). Certainly it is not apparent that there is a deliberate deposition of artefacts that may be considered as contemporary with the habitation or initial stages of site abandonment. (The situation might be different for the pottery from the site but regrettably the information is not available). The occurrence of finds in the upper fills of some structures (e.g. room 1569) does not necessarily represent an exception to this pattern of leaving a site clean. In such cases there is little to suggest that these structures – once abandoned - were the receptacles for refuse from other inhabited portions of the site; rather it is probably the case that artefacts might have been included in the act of deliberate infilling and levelling of structures to build anew. Certainly, a number of features were relatively clear of finds and subject to deliberate infilling (according to the excavator's observations (e.g. Building 516 in Area III)) instead of the gradual accumulations associated with natural and cultural formation processes seen at the other sites considered in the present study (see, e.g. the multiperiod pits at Mylouthkia analysed in **section 7.6.3**). The fact that none of the structures at Jerablus Tahtani stood empty or ruined to be used as refuse zones has wider socio-cultural implications as it suggests that site-wide renewals of settlement occupations (or building levels) took place.

Third, those artefacts that reveal possible habitation stage deposition are largely of three kinds; namely, artefacts that were used as constructional material or constituted fixtures (e.g. pivot stones), artefacts that were unintentionally deposited in out-of-the-way locations within the settlement and artefacts that were deliberately deposited as grave goods (the latter are considered in the following section).

The first group of finds require little elaboration, clearly they were deliberately utilised or reused, and represent purposive human action. The majority of these comprise artefacts associated with the category of heavy processing, particularly querns and rubbers, reused in the walls of structures. As it is clearly the case that the bulk of the finds recovered from Building 1000 were reused as construction material they classically illustrate the way in which redundant artefacts can, perhaps solely by virtue of their physical or material properties, be used to serve another function. Indeed, in the case of the reuse of redundant heavy processing equipment for stone walling in Area IV it may be conjectured that such stones were deliberately retained and possibly stockpiled for future construction purposes. Thus, they might have moved from use to provisional refuse to reuse in another function. In the process the meaning of, and value placed in such artefacts would also undergo a series of transformations, although it is equally the case that earlier meanings or associations retained and remained of relevance to the later treatment (or deposition) of finds. The original location of their use of heavy processing artefacts recovered from Building 1000 must remain a matter of conjecture, however the association of a concentration of such artefacts in this level of Area IV, in combination with some evidence of grain processing activity within the building (as represented by the plant macrofossil assemblage that was recovered from this structure), perhaps points to a rather more subtle link between these worn/broken finds and Building 1000. It is possible the reuse of such a quantity of heavy processing artefacts in the walls of the building was intentional not simply because they provided useful building material but had an historical and/or symbolic association with subsistence activities operating during the second phase of Building 1000's existence. Indeed, it is possible that these artefacts were directly associated with activities carried out within an earlier phase of construction. In other words, the reuse of heavy processing artefacts in the walls of Building 1000 potentially provides an indication of the wider applicability of , for example, both of Chapman's (2000a: 30-31) concepts of grounding and presencing (see **section 3.3**). The heavy processing artefacts are thus not simply construction material, they are artefacts that have historical associations with the structure in which they are literally embedded.

Also included in the first group of finds are the pivot stones that are found, set into the floors of rooms at the thresholds to doors. These constitute the largest artefact class recovered as fixtures and, presumably because they fulfilled the role of an installation, they were generally left behind on the abandonment of structures.

The second group comprises those finds that were recovered from out-of-the-way locations, for example, from the deposits that had collected in the drains of a number of passageways (principally in Area IV) presumably during the occupation of the settlement. The small find assemblage from these drains is limited but, in terms of composition, reveals a surprising variety. In addition, it is notable that these contexts have produced small artefacts such as beads that were presumably lost and washed into the drains during the course of the site occupation. It may therefore be surmised that this material was not intentionally dumped; instead it is an unintentional product of maintenance strategies and – more particularly - the passage of everyday life and activity. The inadvertent nature of such artefactual deposition is of importance, for arguably it is this material, limited in quantity though it is, that best of all illustrates the concerted efforts taken to clean and maintain structures and access routes within the densely built environment of the Early Bronze Age fort. As a caveat to this point, however, excavation records indicate that a large quantity of sherds were commonly recovered from drains at the site; it is quite possibly the case that these were deliberately placed in the drains to act as soak away material. If indeed this was the case then clearly doubts must be raised concerning the unintentional deposition of other artefactual materials.

The third and last group covers those artefacts that were clearly placed with the dead in deliberate acts of structured deposition. The funerary assemblages from Early Bronze Age graves in Area IV provide a useful comparison with the artefactual assemblages recovered from structural contexts. Considered as a whole the assemblage is larger than that from the structural contexts. Furthermore, a number of tombs contain multiple inhumations that were clearly involved multiple acts of interment and the displacement of earlier burials upon the placement of the newly interred. This continuity of use (and/or reuse) might point to familial relations between those buried, and thus to family tombs (for comparable examples see Titris Höyük (Matney et al 1997: 67)). The treatment of the dead and of their grave goods – both of which are shunted to one side of the tomb – however, perhaps points to some subtler shift in meanings attached to the dead that might draw temporal and emotional distinctions between the newly dead and those who died earlier.

The contrast between the deliberate deposition of grave assemblages and the paucity of artefactual deposition in structures is of some interest as it demonstrates distinctions in individual and societal attitudes to deposition in contexts associated with the dead and those associated with the living. In addition, these graves occur either below floors, between buildings or – most commonly - between occupations (i.e. during hiatuses in settlement occupation). They are cut into earlier settlement deposits, a fact that cannot have been lost on the grave diggers. In a sense the practice of burial thus involved giving presence to the Other, the past (Chapman 2000a: 30; see **section 3.3**). Indeed, the very act of cutting into the material remains of past occupations might have served to symbolise (even strengthen) the ties between the past and present occupations, between the newly dead and the long dead.

The evidence of a potential change in the use of settlement space between levels is also intriguing, all the more so when considered in conjunction with the planned character of the built-environment. In respect of the latter, the architectural evidence of settlement planning and potentially of central control can be related to the patterning of artefactual deposition. Changes in the use of areas on the Tell from settlement to cemetery and back again may in turn be related to central or community-level decision-making processes, a point that will be returned to below.

As discussed above, artefactual deposition within structures cannot support conventional spatial analyses that rely on the assumption of *in situ* contexts and objects; activity zones cannot be discerned. However, different questions may be asked of the record of this and other sites, questions that prioritise the socio-cultural implications of artefactual deposition and the abandonment of contexts. Why, for example, are structures left clear of finds? Why are some structures deliberately infilled and built over anew? What are the implications of changes in settlement use or occupation, for example as from 'residential' to cemetery areas? Such questions as they obtain to the history of the site require a consideration of meanings that, though witnessed in specific contexts and in the treatment of particular artefacts, have a greater significance at a supra-household or community-wide level.

With regard to major issues of social and/or cultural evolution, such as early state formation and urbanism (see **section 8.3**), it is instructive to note that the occupations at Jerablus coincide chronologically with periods that witnessed contact with the Uruk culture in the fourth millennium BC and the growth of urban entities in the Upper Euphrates region during the third millennium B.C. (see, e.g. Schwartz, 1988: 10). With respect to the former, particular scholarly attention has been paid to the interactions between indigenous communities of the Local Late Chalcolithic and foreign advanced polities from the Southern Mesopotamian alluvium (e.g. the Uruk culture). At Jerablus, for example, Stephen and Peltenburg (2002) have already argued that there is a sharp boundary between Local Late Chalcolithic and Uruk period occupation at the site marked by a wholesale change in material culture, architectural construction techniques, manufacturing techniques for pottery, textile production and possibly also discard techniques. According to them, all such changes signal changes in *habitus* (a concept that is borrowed from Bourdieu (1977; see **Chapter 3**) from Late Local Chalcolithic to southern style Uruk practices and may be seen as indicative of altered identity.

Naturally, given the limited exposure and the incomplete post excavation analysis of material there is little additional data to confirm the truth of such conclusions. Yet, certain parallels can be made between artefact deposition at Jerablus and that seen at broadly contemporary sites of the Late

Chalcolithic and Late Uruk period. For example, Stein et al. (1998: 147) report that *in situ* Local Late Chalcolithic and Uruk finds are rare at Hacinebi, despite the recovery of burnt structures with associated debris of collapsed burnt roofs and ceilings. Operation 14 in 1995 produced the first at the site: within a portion of a domestic structure/house they found Uruk ceramics, a pestle, a palette, and part of a mosaic cone on a floor layer (Stein et al. 1996: 87). Otherwise the majority of small finds come from Uruk 'trash' filled pits (Stein et al. 1998: 147-8). Indeed, two structures from the first contact phases 'had been cleaned out and then deliberately filled' (Stein et al. 1996: 93). Also of further note are observations made concerning the occurrence of complete Uruk ceramics (e.g. Bevel Rimmed Bowls and conical cups) in pit fills (Stein et al. 1997: 119). The significance of these ceramics, particularly Bevel Rimmed Bowls, has been keenly debated with a number of scholars arguing that the evidence of standardisation, their quantity and expendability are indicative of mass production and, therefore, of the urban character of the Uruk period (e.g. Buccellati 1990). Their function has been variously associated with rationing, salt procurement, shipping or storage (see, e.g. Beale 1978; Buccellati 1990). Interestingly, observation of the stratigraphic context of Bevel Rimmed Bowls at numerous sites, has indicated that they are often discarded in an *in situ* context and that, therefore, there is a high degree of intentionality in their disposal; a disposal that took place in the general working area (Schwartz 1988: 7; see also Nissen 1972: 99). At Jerablus, Bevel Rim Bowls occur in groups, deposited intact on external surfaces (e.g. in Levels 11 and 12 of Area III). This patterning is unusual when compared to other later contexts of recovery at the site, for example, intact vessels rarely occur within the built environment of the Early Bronze fort (outside of the rich grave assemblages).

The Early Bronze Age settlement at Jerablus corresponds to a period that saw the development of a number of large urban settlements, including Carchemish, 4km to the north (see, e.g. Archi 1992, 1996; Astour 1992; Matthiae 1993: 526; **section 6.4**). Explanations for such developments have commonly focussed on contact with more advanced (Southern Mesopotamian) polities (see, e.g. Tell Leilan in Northern Syria (Weiss 1990a-b; Weiss et al. 1993)). The significance of Jerablus should not be underestimated; indeed, research at the site has been focussed on the elucidation of the process of secondary state formation in the region (Peltenburg 1997b: 122-3). Although Jerablus is a small site, its fortified nature, the occurrence of a monumental tomb, its location next to the Euphrates River and its proximity to Carchemish all invite speculation as to the character of its occupation, and its place in the wider socio-political organisation of the area. Did the site enjoy a high degree of independence? Was it self-sufficient or did it have a specific role prescribed by the nearby city of Carchemish? Naturally it is difficult to provide unequivocal answers to such questions, however it is notable that some scholars see the small sites of the Tishreen dam area with Early Bronze Age occupation as serving specific functions within a wider state organised society. For example, McClellan (1999) writes of the granaries and storage centres at Atij and Raqâ'i, the military outposts at Jerablus Tahtani and Tell Ab'd and the cult centres at Tell Kabir, Qara Qosaq and Tell Banat North. Interestingly, McClellan has also suggested that the many points of variability between the Euphrates sites reflect the input of local indigenous cultures. Approaches that promote the investigation of site formation processes and search for socio-cultural meanings in the deposition of artefacts have the potential to contribute to the elucidation of intersite variability.

The observation that small find patterning in the built environment of the Early Bronze Age fort at Jerablus indicates a consistent policy of maintaining comparatively clean living spaces during the habitation phase that might have been allied to other social and/or economic activities. For example, Wilkinson (1993) has, on the basis of extensive field surveys, argued that the removal of rubbish and material not only served the function of taking away unhygienic, obstructive or hazardous material, but also was carried out in the act of manuring fields. Indeed, he has also suggested that the practice of manuring was of integral importance to the intensification of agricultural production that fuelled urban developments. Alternatively, material was simply dumped away from the settlement. With regard to the latter, parallels can be made with larger urban settlements of the Early Bronze Age period, where excavators have reported large quantities of refuse being purposively discarded at the edge of cities (e.g. Charvát 1993: 173-75; Matthews and Postgate 1987: 107; Matthews and Postgate 1994: 176). Such activity could be indicative of attempts to organise the disposal of refuse at a community wide level and therefore may be linked to aspects of settlement social organisation (see Pollock 1999: 48-9); if this is the case then it ties in with later discussion concerning urbanism and the development of early states (**Chapter 8**).

Finally, the contextual analysis of artefactual deposition during the Early Bronze Age fort occupations at Jerablus suggests that artefactual patterning is linked to the practicalities and experience of living in the dense built-environment of the site. In turn, the experience of living in such an environment also involved living with the both one's own individual history and with the history of previous occupations, a history that was physically manifested in the form of the settlement mound. When considered in conjunction with the planned nature of the settlement, the way in which structures are abandoned, infilled and replaced, and the character of other changes in settlement use over time (e.g. from residential to cemetery use) it is possible to argue that the patterning of artefactual deposition is a testament to wider socio-political and cultural values and concerns. Indeed, the deliberate infilling of structures at abandonment and the reconstruction of new building levels that naturally raises the height and increases the visibility of the settlement in the landscape may have constituted a conscious evocation of past inhabitant's sense of place and identity.

6.8 CONCLUSIONS: WIDER IMPLICATIONS FOR THE PRESENT STUDY

The preceding analyses and discussion has a number of wider implications for this study as a whole. In form, Jerablus clearly constitutes a rather different type of settlement from the open plan settlement of Sabi Abyad (**Chapter 5**) or the even more intangible site of Kissonerga-Mylouthkia (**Chapter 7**). With the exception of the poorly known pre-fort Early Bronze Age settlement, there are no burnt structures or occupation levels at the site. Jerablus also differs from the other two sites in terms of the character and the abundance of the artefactual assemblage. This is a site that is, across the board, highly productive of finds (particularly of sherds), however this is largely a product of the rich funerary assemblages that have been recovered. The removal of these assemblages from our discussions of the portable material culture immediately reveals that finds are not by any means common in all features and contexts at Jerablus; whereas structures and numerous other features and spaces at the other two sites produce large quantities of finds and in a number of cases they appear to have existed as the receptacles for large quantities of artefactual material (see, e.g. Building 2 at Sabi Abyad or Pit 16 at Mylouthkia; see **sections 5.7.2** and **7.6.3** respectively). Furthermore, analysis of those finds that do occur in structures at Jerablus reveals that a high proportion are either pottery or well-worn and often broken items of stone (usually querns and rubbers). Therefore, it might come as no surprise to realise that Jerablus poses very different challenges to an artefactual and contextual analysis than does the site of Sabi Abyad considered in the preceding chapter (**Chapter 5**).

The character of the settlement in the period preceding the fort and that associated with the fort occupation differs to a marked degree. Although the exposure of pre-fort Early Bronze Age and the earlier Uruk and Local Late Chalcolithic settlements is limited, these levels provide a tantalising glimpse of both similar and different attitudes to the treatment of certain artefactual categories at their point of discard when they are compared to the Early Bronze Age fort occupation. Thus, for example, the various structures revealed from the pre-fort occupation levels consistently produced few artefacts; a pattern that corresponds to that seen in many structures of the fort period. In addition, there is evidence of the reuse of certain artefacts as building material during both pre-fort and fort occupations. The clearest difference is between the treatment of Uruk pottery vessels (principally Bevel Rimmed Bowls) during the Level 11 and 12 occupations in Area III and the treatment of such vessels in later levels (although there is the occasional occurrence of complete or reconstructible vessels in early fort levels in Area IV). Indeed, this pattern of deposition is generally unusual for any category at the site.

Early Bronze Age Jerablus constituted a dense built-environment of rooms and narrow passageways, an environment in which space might well have been at a premium. Unlike, Sabi Abyad there is no indication that buildings were abandoned while others remained in use (for example, as noted above, there is no evidence of the disposal of refuse in structures after use). When buildings fell out of use there is evidence of the deliberate infilling and levelling and the rebuilding of new structures above. In some cases, new wall alignments followed old and, in the case of Building 1000 (for example), it is possible that new structures fulfilled similar purposes. Other structures reflect this continuity in settlement plan, for example, the passageways and drains of Area IV. Such continuity in use between phases is, however, most notably broken by phases of cemetery use.

Naturally, a variety of formation processes will have affected the composition and condition of the assemblages that have been considered above. Nevertheless, it is maintained that there are significant continuities and discontinuities in the pattern of artefactual deposition and the layout of the settlement over time and that these are - in part - the outcome of both intentional and unintentional human activity. This activity takes place during the operation of specific site maintenance and abandonment procedures as well as other social practices (e.g. the burial of the dead). It cannot be assumed that the motivation behind such practices is akin to modern estimations of utility, replacebility, economic worth or hygiene. Furthermore, it is clearly the case that the settlement contexts at Jerablus that have been considered here provide little material for functional analyses that are founded on the *in situ* contexts and assemblages. Nevertheless, when considered alongside the contextual evidence, the treatment of artefacts at their deposition can be fruitfully interpreted in other ways. Thus, it has been argued that the artefactual patterning is linked to the practicalities and experience of living in the dense built environment of the Tell. More particularly, the Tell, as an artefact, is invested with a considerable history, something of which successive generations of inhabitants would have been aware. It has also been argued that the planned nature of the settlement, the way in which structures are abandoned and replaced, and the character of the changes in settlement use over time are a testament to wider socio-political and cultural concerns. Indeed, the deliberate infilling of structures at abandonment and the reconstruction of new building levels, that naturally raises the height of the Tell settlement in the landscape, may have been motivated by a conscious intention to create high and - by extension – clearly visible sites. This might be seen in contrast to other sites associated with different socio-cultural and economic circumstances (as at Tell Sabi Abyad with its agro-pastoralist economy).

The identification of continuities and discontinuities in site maintenance and abandonment activities and the relationship between these activities and wider systems of value, inspires discussion of related but wider issues obtaining to social organisation and socio-economic change (see discussion in **Chapter 8**).

CHAPTER 7

ANALYSIS OF KISSONERGA-MYLOUTHKIA, CYPRUS.

7.1 THE SITE

Kissonerga-Mylouthkia (hereafter Mylouthkia) is a coastal site situated 2.5km NNW of Lemba village in the Paphos District of SW Cyprus (Peltenburg 1979a: 23-5, 1979b: 80-83, 1980: 1-7, 1981: 25-8) (**Figure 1** and **92**). It is one of three sites of Neolithic and/or Chalcolithic date excavated by the Lemba Archaeological Project. Two other more extensively excavated and published sites in this group, known as the Lemba Cluster, are Kissonerga-Mosphilia (Peltenburg 1986, 1987, 1988, 1991; Peltenburg 1991a-b, 1998) and Lemba-Lakkous (Peltenburg 1979a, 1980, 1981; Peltenburg 1985a).

The full extent of the site of Mylouthkia is not known. At present it covers approximately 6 hectares of land that gently slopes to the sea cliffs of the Mediterranean shoreline (that define its western boundary) and to the lip of the declivity of the River Apis to the north (Peltenburg 1979a: 23; Hadjisavvas 1977: pl.LXXIX.3). The majority of those features excavated are within 50m of the shoreline, and approximately 25m.a.s.l. (**Figure 93**). However, a recent tourist development has revealed features stretching further inland, including additional large pits and massive linear ditches that are largely of Aceramic Neolithic and/or Early Chalcolithic date.

7.2 HISTORY OF EXCAVATION

Approximately forty separate features have been identified to date (rather fewer have been excavated) during four main phases of excavation at the site. However, the excavation of Mylouthkia remains unfinished as a result of new discoveries that have been revealed in the course of ongoing tourist developments.

The first campaign was conducted between 1976-1980 and saw the identification of features 1 to 34 (a number remained unexcavated). All were pits and hollows that have been generally dated to the Early Chalcolithic period on the basis of their respective assemblages and a handful of C14 dates. The second campaign occurred in 1988-89 and saw the rescue excavation of a number of other features (features 100 to 110) that now lie beneath the car park of the Queen's Bay hotel. These features again included pits and hollows as well as ditches and a well. The majority of these features indicate Early Chalcolithic period activity in the main, however there is some later activity. The well is probably of aceramic Neolithic date but saw some disturbance in its upper levels during the Early Chalcolithic. The third campaign of excavations between 1994-96 saw the excavation of units 111 to

351, including Chalcolithic Buildings 152, 200, and 330 and a number of aceramic features. Amongst the latter were two wells that produced a rich and varied assemblage, including a wealth of environmental and artefactual material obtaining to the earliest known period of habitation in Cyprus. The most recent and ongoing campaign is not considered here; those features that are analysed below were all excavated prior to 1996. Altogether, Mylouthkia has produced a significant quantity of ground stone tools, flint, bone, pottery, faunal remains, and archaeo-botanical data.

To date, artefactual assemblages from certain features and C14 dates suggest occupation at the site during the aceramic Neolithic (8th millennium BC) and later on in the Early and Middle Chalcolithic periods (mid 4th to mid 3rd millennium BC). The few C14 dates, in combination with pottery analyses, suggest broad chronological parity between certain features but do so without any great precision. Two hollows have produced calibrated C14 dates of c.3620-3490B.C. (Pit 16), and 3650-3500B.C. (Pit 1) (Burleigh 1981; Peltenburg 1979, 1981). Such dates place this phase of occupation at the site to the transitional period between Sotira and Erimi cultures (Peltenburg 1981b: 24). Building 200, however, has produced dates falling in the early stages of the Middle Chalcolithic period, confirming the evidence from the pottery sequence.

7.3 PREVIOUS RESEARCH

The site of Mylouthkia has been the subject of a number of preliminary reports and the first three campaigns are currently in the process of final publication (Peltenburg 1979a: 23-5, 1979b: 80-83, 1980: 1-7, 1981: 28-31; Peltenburg et al. forthcoming). There have also been a number of studies of material from the site (e.g. Elliott 1983, 1991). Recently, much attention has been focused on the aceramic component of the site, particularly the five wells that have been identified to date (e.g. McCartney and Peltenburg 2000; Peltenburg et al. 2000a, 2001a and 2001b). The latter have fuelled debate concerning the date and form of the earliest colonisation of Cyprus, as well as the origins of the colonists, the motivation behind their migration and the mechanisms of colonisation. However, this aceramic component will not be considered in the analysis below. Nevertheless, its character and presence at the site must be born in mind given the potential for a reworking and reuse of earlier features and the concomitant potential for recycling and redeposition of much earlier material in the later Chalcolithic contexts. The presence of aceramic features and material thus creates additional complications in the analysis and interpretation of the site.

Research carried out by the Lemba Archaeological Project at two other sites nearby, Kissonerga-Mosphilia and Lemba-Lakkous, is also of interest here for the insights that it has provided into the character of Middle and Late Chalcolithic settlement in SW Cyprus. Of particular interest to the present study is the consideration that has already been paid to various aspects of site taphnomy and building functions on both sites (Peltenburg 1985a: 233-262, 1998). In the case of Lemba-Lakkous earlier research has focussed on the identification of primary and secondary assemblages, the occurrence of fixtures (as indicators of activity) and the organisation of the settlement as an 'embodiment of the socio-economic organisation of the group and as a metaphor of its culture (Peltenburg 1998a: 233). Investigation of Kissonerga-Mosphilia has concentrated on the investigation of assemblages and fixtures in terms of the standardisation of house plans and the nature of social organisation with reference to diachronic change. Although these sites are broadly later in date than the majority of the features analysed from Mylouthkia below, there are some parallels to be seen. For example, the extraordinary character and preservation of Building 200, and the artefactual assemblage that it yielded, parallel comparably rich structures at Lemba-Lakkous and Kissonerga-Mosphilia.

7.4 THE IMPORTANCE OF KISSONERGA-MYLOUTHKIA TO THE PRESENT STUDY.

As is the case for the other analysed sites, the individual contribution of Kissonerga-Mylouthkia to the larger study is at more than one level.

First, Mylouthkia is a site of a very different nature to the others considered in this study. Unlike Sabi Abyad (**Chapter 5**) and Jerablus (**Chapter 6**), Mylouthkia is not a Tell site. In fact such phenomena are unknown in Cyprus. This clear difference between Mylouthkia and the other two sites is a profound one. Whereas Jerablus and - to a lesser extent - Sabi Abyad are comparatively dense built environments that appear to possess functionally distinctive internal and external spaces that probably influence the differential treatment of artefacts, Mylouthkia offers a more ephemeral pattern of dispersed features of varying dates and functions. The occupation is altogether less tangible; indeed, many of the features are negative (e.g. pits, hollows and wells).

Excavations have recovered features that differ significantly not only in form and function but also in date. They are also spatially distinct as horizontal stratigraphy is generally lacking due to the erosion of the ancient land surface. This situation naturally hinders cross-dating and chronological sequencing, and substantially influences the direction and scope of an intrasite study. In particular, it is impossible to reconstruct the 'contemporaneity' across the site required by most traditional intrasite spatial analyses that concentrate on the patterning of coterminous and every-day subsistence or craft activities. In addition, with one exception (e.g. Building 200), Mylouthkia generally lacks the relatively clear and substantial architectural elements found on the other two sites. The evidence that exists of occupation and structures is generally far more ephemeral and largely but not exclusively confined to pits and hollows. This situation has both direct and indirect implications for sequencing, recording, recovery and analysis of material from the site.

Nevertheless, Mylouthkia is a site that has seen multi-period - albeit discontinuous - occupation over a large area and a considerable period of time. This longevity of occupation, in combination with its ephemeral character (and the attendant problems of survival), has inevitably impacted on efforts to identify aspects of past human behaviour at the site. In particular, it appears that a number of the features that are considered later appear to have changed function at numerous points in the course of their 'life'. Thus, some hollows show evidence of quarrying, habitation, middening and burial. Although, this diachronic quality to many features is difficult to distinguish, it has manifest ramifications for the study of formation processes and the reconstruction of past human behaviour at the site.

It is clear that Mylouthkia requires careful analysis of contexts and artefactual content particularly given the strong suggestion of recycling and disturbance of earlier deposits during certain phases of occupation. Indeed, as a site, Mylouthkia presents the archaeologist with great interpretative challenges with regard to the nature of site occupation as a whole. As a result of the site's longevity and its ephemeral nature, Mylouthkia provides a useful methodological testing ground where functional and architecturally driven notions of *in situ* artefacts or activity areas are weakened by general difficulties in defining the nature and function of features other than in those two buildings that have been clearly identified. At Mylouthkia it is generally the case that one cannot rely on architectural evidence of function (and behaviour). In addition, where walls and floors are insubstantial or unidentified, the ability to reconstruct specific behavioural episodes or claim a location of primary discard becomes difficult (if not impossible) for the majority of the excavated features. Indeed, arguably there is a tendency to immediately consider that the deposits contained within such features are secondary. However, as argued in **section 3.3**, it would be a mistake to interpret secondary midden-type deposits simply as rubbish a modern Western sense of the word. A number of studies of material and contexts on European sites (e.g. Chapman 2000a, 2000b; Hill 1995a; Needham and Spence 1997) have argued against the functionally led definition of middens and/or pit fills as being the receptacles of useless and defunct artefacts and other debris. Such studies have instead demonstrated the potential for such contexts and their assemblages to produce new insights into prehistoric social practices and rationality. On another site, such as those analysed in previous chapters (e.g. **Chapters 5 and 6**), where architecture is abundantly present such midden-type deposits might be short-sightedly dismissed in attempts to pattern *in situ* activity at a site.

In addition, Mylouthkia is one of the few sites in Cyprus to have a substantial Early Chalcolithic component. This is one of the least well documented and understood periods in Cypriot prehistory, sandwiched between the Late Neolithic and Middle Chalcolithic periods that have both yielded evidence of substantial settlements. Interestingly, the Early Chalcolithic period has also been discussed in the context of a repeated pattern of settlement discontinuity in the archaeological record of prehistoric Cyprus (e.g. Peltenburg 1993b). Given the general paucity of Early Chalcolithic settlement remains on record, the material from Mylouthkia is of considerable importance. Analyses that can yield new interpretations or inferences concerning, for example, social practices involved in the treatment of artefacts and contexts during the habitation and abandonment stages can only serve to improve wider archaeological understanding of what is a relatively little known period of settlement in Cyprus. Mylouthkia also has an early (transitional) Middle Chalcolithic occupation represented by Building 200. This is broadly contemporary with certain occupations at other excavated sites in the Lemba Cluster (e.g. Kissonerga-Mosphilia and Lemba-Lakkous); consequently, parallels may be drawn between Building 200 and certain structures at these other sites.

Finally, given the character of the Mylouthkia features and their assemblages, the challenge is to establish whether the artefacts can facilitate the interpretation of human behaviour (beyond their use-life function) on this or any site of a similar ephemeral nature, whether they are located within or outside Cyprus and the East Mediterranean. As will be argued below, despite the problems that obtain to the analysis in terms of spatial activity of feature function or chronology the character of the assemblage affords an interesting study in terms of the abandonment of artefacts, contexts and also factors of curation and expediency (see **Chapter 4**).

7.5.1 ANALYTICAL CONSIDERATIONS

Ahead of the following analysis, it is worth noting that there are a number of factors that affect the application of contextual and multivariate artefact attribute analysis to the site of Mylouthkia. One such factor relates to the immeasurable impact of retrieval strategies on the analyses.

A feature of the site are the differences between the excavation strategies of the three main campaigns that in part reflect the various periods of their excavation, together with the presence or absence of untoward and unpredictable external pressures. For example, the first campaign (1979-81) saw the excavation of a number of features carried out without any prior knowledge of the nature of the site and therefore of what to expect. The majority of features appeared as pits and hollows in the sections produced by modern quarrying and track cutting and were largely excavated as midden deposits. The second campaign was conducted as a rescue excavation where excavation had to be carried out hurriedly in adverse conditions that were produced by pressure from the developers of the Queen's Bay Hotel and car park. The third and final campaign probably saw the best work conducted at Mylouthkia, the result of considerable prior experience of the site itself and of sites nearby (e.g. Lemba-Lakkous and Kissonerga-Mosphilia) and also of an absence of pressure from development. The most recent and current campaign is outside the remit of the present study but, once again, the excavations are being carried out as a response to development. Ultimately, the overall effect of varying retrieval strategies used at Mylouthkia cannot be known, however it may be surmised that there exists some a lack of parity between the level of recording conducted from feature to feature excavated over 3 campaigns that must effect the level of analysis. Naturally, as a result of the impact of recovery strategies there are problems inherent in the intrasite and intersite study of material from this, and perhaps from any site.

7.5.2 CONTEXTUAL

Beyond the limitations imposed by the recovery strategies that were employed, one of the key problems that the site presents for a comparative analysis between features is that the features probably cover a wide time span – a time span that incorporates an unknown number of occupational episodes. Most significantly, the site lacks the framework of a horizontal stratigraphy; this is due in large part to the severe erosion of prehistoric and historic land surfaces. Therefore, though we have numerous features (such as pits, hollows, and buildings) we cannot be certain that any are contemporary for the purposes of synchronic spatial and functional analyses. This directs any detailed artefactual study to an analysis of separate features as discrete entities, which is also problematic, given their stratigraphic - and thus temporal - complexity. Indeed, for many features fine stratigraphic information is largely unavailable as a result of excavation procedures that understandably struggled to pick up the nuances of midden type deposits (see above). Nevertheless, the character and formal variety of the assemblages and deposits that occur within these pits is of some interest. This is particularly the case in the light of a number of studies of pitfills and middening that have led to conclusions regarding the (often) formal patterning seen in pitfills and their assemblages (e.g. Chapman 2000b; Hill 1995a-b; Needham and Spence 1997).

The contexts analysed from the site may be categorised as follows:

Buildings	Buildings 152 and 200 of Early and Middle Chalcolithic date, respectively.
Pits	Pits 1, 16, 24/28, 100, 105-109, largely of Early Chalcolithic date.

Ahead of the analysis there follows below a section concerning artefactual considerations applicable to all contexts.

7.5.3 ARTEFACTUAL

In addition to those problems related to cross-contextual analysis at the site that are referred to above, there are a number of considerations relating more directly to the content, composition and distribution of the artefactual assemblages that are to be analysed. For a summary of broad functional categories applicable to the following analysis see **Table 127** (see also **Figures 94-5** and **Appendix 1**). At Mylouthkia, a large proportion of the artefactual assemblage is comprised of ground stone artefacts; by comparison, there are far fewer artefacts of other materials. In this respect the site differs from both Sabi Abyad and Jerablus Tahtani where the ground stone repertoire tends to be more limited and the proportion of stone to other materials smaller.

The preponderance and variety to the ground stone assemblage from Mylouthkia impacts on the nature of the information to be gleaned from the study of the artefactual assemblage recovered from the site. Thus, to a certain extent, of the total assemblage of registered artefacts, the ground stone offers the greatest potential for analysis of aspects obtaining to the reuse, recycling and final deposition of artefactual assemblages. In particular, ground stone provides an opportunity to make observations regarding the importance of curation to abandonment and discard of a large component of the total artefactual assemblage recovered from the site. A major characteristic of the stone assemblage is that many artefacts are multifunctional in use or have been reused and recycled. In the case of the former, multifunctionality confuses the typological classification of artefacts; it also - by extension - affects the consideration of gross categories of expedient and curated types. Regarding the latter, reuse and recycling though in many cases recognisable can in some cases confuse the identification of the original function of an artefact; this is particularly true of artefacts made of durable material like stone (and not true of reused sherds for example).

7.6.1 ANALYSIS

For the purposes of this study only a select few features have been chosen for detailed consideration, namely the multiphase pits 1 and 16, and the Buildings 152 and 200. A number of the other pit features are also analysed but at less length.

The information presented is taken from original site records, specialist reports, existing databases and from the final report (Peltenburg et al. forthcoming). Analysis will proceed with the separate consideration of individual features in an order that is defined by their broad character as building (e.g. 152 and 200) or pit (e.g. 1, 16, 108-110). This order does not conform to any chronological sequence, but is instead designed to allow analysis of the more concrete architecturally defined features ahead of those that are more ephemeral and more complex. A short summary of the characteristics of these features will precede a more detailed investigation of their respective artefactual assemblages.

The individual contextual analyses follow the stages established in earlier chapters (see **Chapter 4**; see also **Chapters 5** and **6**). The first deals with the occurrence of broad functional categories of small finds. Here it is necessary to stress again that the allocation of function is broad and general and designed to facilitate closer inspection of the large body of disparate forms and materials that make up an artefactual assemblage such as that recovered from the site of Mylouthkia. The second combines this functional information with a consideration of the condition and material of artefacts. Finally, the third combines functional category and condition with measures of size and explores aspects relating to notions of curation and expediency to consider artefactual assemblage in its refuse function and also to consider features as the receptacles for this artefactual material.

In this section, features will be considered and analysed individually prior to drawing broader cross-contextual level conclusions and interpretations at the close of this chapter. The contextual analysis is divided into three sections namely: buildings, multiphase pits and other pits.

7.6.2 BUILDINGS

Only Buildings 152 and 200 are analysed in this section as these represent the two clearest identified structures at the site. However, they are not the only features producing evidence of occupation. Both Pit 1 and Pit 102 also produced trampled surfaces, postholes and/or installations suggestive of *in situ* structures; however, because of their intangible nature, poor preservation and the later 'middening' activity present in these features they will be studied alongside similar 'negative' features below.

Building 152 is the earlier of the two structures, constituting a rare – albeit incompletely preserved – example of an Early Chalcolithic structure (of a similar period to the two pits with occupation that are mentioned above). Building 200 is later in date; radiocarbon and pottery chronologies suggest that it can be dated to the early stages of the Middle Chalcolithic. Parallels for this form of structure are numerous (see, e.g. the sites of Kissonerga-Mosphila and Lemba-Lakkous mentioned previously).

BUILDING 152

Building 152 comprises the ephemeral and fragile remains of a circular timber building sitting in a slight hollow (4.4m in diameter) with a number of its internal fixtures surviving at least partially intact (including a floor surface surrounded by postholes, a mud ridge, potsettings, pivot stone emplacements, a plaster basin and a hearth) (**Figures 93** and **96**). The interior of the structure had been packed quite solidly with a fill of stones and blocks of consolidated structural mud.

Building 152 yielded an assemblage that, for Mylouthkia, is extraordinary in its paucity and lack of variety. Only 21 artefacts were recovered from the feature as a whole (including individually catalogued antler debitage). The majority of these finds were located on the floor of the structure or they were built in as fixtures. These latter are unusual in terms of the site as a whole, as artefacts that can be tied directly to '*in situ*' activity (i.e. to activity that is associated directly with the habitation phase of the structure). Only Building 200 has similar built installations.

Almost two thirds of the assemblage (61.9%) belongs to the category of heavy processing, followed by the categories of other (19%) and containing (14.2%); there is also a single artefact associated with personal ornament (**Figure 97; Table 128**). A significant proportion of the assemblage as a whole is fragmentary (71.4%) with the highest degree of fragmentation for the categories of personal ornament, containing and other (100%). The category of heavy processing produced the lowest proportion of fragmentary artefacts (53.8%). Given the overwhelming proportion of heavy processing artefacts it is unsurprising the bulk of this small assemblage comprises artefacts of stone, followed by antler and pottery (**Table 129**).

The majority of the artefacts recovered are between 10 and 20cm (**Figure 98**; **Table 130**). A significant number are over 20cm, however only a small proportion are smaller than 10cm in length. These proportions correlate with the occurrence of certain artefact categories (e.g. heavy processing). The bulk of this assemblage comprised curated artefacts (61.1%), the majority of which were fragmentary (81.8%) (**Table 131**). By way of contrast, the majority of expedient artefacts were recovered complete (57.1%).

With such a small total, the assemblage lacks statistical viability, however when contrasted with the other features it raises some interesting questions about the abandonment of structures and the deposition of artefacts on abandonment at the site. In particular, it points to a possible abandonment tradition involving the removal of the majority of the lighter and more portable artefacts of curated form. The result is the marked depletion of the systemic inventory. This pattern might have been repeated in other features that exhibit evidence of ephemeral timber structures and habitation (e.g. Pits 1 and 100). Notably, this pattern of assemblage depletion associated Building 152 is in marked contrast with the situation presented by Building 200 phase 3 (see below). As a consequence, the Building 152 assemblage will be referred to later in the analysis and discussion of other features from the site. On a cautionary note, given its uniqueness and state of preservational, it cannot be assumed that Building 152 is representative of an Early Chalcolithic dwelling or other structure.

BUILDING 200

Building 200 comprises a stone built circular structure of Middle Chalcolithic date with a diameter of some 6m (**Figure 93** and **99**). It is the sole example of upstanding stone built architecture at the site and post-dates the other features at Mylouthkia. The uniqueness of the feature in terms of chronology and form is enhanced by evidence to suggest that it underwent an extraordinary event or series of events leading to its final abandonment and possible destruction by fire at the close of the final period of occupation. In addition, the building produced a considerable abundance and variety of material, particularly from the last phase of occupation. A large proportion of the artefactual assemblage recovered from this final phase remains either intact or reconstructible (in respect of pottery vessels). As a result, there is ample encouragement for a spatial analysis of material from the structure. In particular, the final phase associated with the building's destruction might present good material for analysis of artefacts by function and distribution within the confines of the structure; although, as has been noted elsewhere (e.g. see Chapters 2 and 5), even in destruction level contexts the assumption of use and *in situ* activity should always be open to question (see Lightfoot 1993: 175).

However, aside from the richness of its assemblage and the evidence of its final occupation phase ending with catastrophic destruction, Building 200 is also interesting for other reasons. First, it appears to represent the final building within a deep hollow, 300, which contains multiple layers of fill containing evidence of human activity over a long period preceding the construction of Building 200. However, this depth of deposit was only explored in a narrow sounding trench alongside Building 200; subsequently, material from this sounding provides little opportunity for a diachronic analysis of developments prior to Building 200. Nevertheless, it underlines the potential longevity of occupation at the site. Second, Building 200 appears to have had a relatively long occupation with at least two distinct phases of occupation other than those associated with the initial construction and final deterioration of the building. This complexity facilitates some comparison between phases and also allows the consideration of interpretations regarding continuity of use and reuse of structures. Third, because the structure contained a large and diverse assemblage, questions arise as to how this assemblage was deposited and why it survived. Lastly, on a related note, the building was possibly deliberately fired. First impressions during the excavation of the structure indicated that it was destroyed by fire, however two different interpretations have been proffered (see Peltenburg et al. forthcoming). Pointing to the intact and rich artefactual assemblage, the skeleton of a child and the evidence of a conflagration, Croft believes that this structure clearly met a sudden and catastrophic end. Conversely, Thomas argues that there is no clear evidence to suggest that this was definitely the case and that the possibility of a gradual abandonment should therefore be entertained. The identification of water laid deposits over the artefacts in the east half of the building may lend substance to this conclusion. The presence of the skeleton in an apparently non-funerary context is all the more intriguing from this point of view. Of particular importance here is the impact that such an event could have had on the artefactual assemblage. For example, can it be assumed that the assemblage is an accurate reflection of the systemic (*sensu* Schiffer 1972) inventory of a presumably domestic building?

It is apparent that Building 200 was occupied over a lengthy period of time and subject to numerous refurbishments and alterations. Four phases of activity have been identified (Peltenburg et al. forthcoming). These are variously associated with the construction, occupation(s) and abandonment of the building. Detailed accounts of the architectural and artefactual characteristics of the structure by phase must await final publication. For general descriptions of the phases see **Table 132**, here there follows discussion of a few salient points that relate specifically to the character and form of the following analysis, discussion and interpretations.

To conclude these general contextual considerations, it is clear that from the broader intra-site perspective, Building 200 is unusual in its form, preservation and depositional history. Whereas there will remain some indecision on the nature of events leading to its final abandonment and subsequent entry into and preservation in the archaeological record, the artefactual assemblage that has been produced is fascinating for its range, abundance and the condition of artefacts at recovery. Analysis will take these attributes and combine them with contextual considerations to explore a range of interpretations.

A total of 338 artefacts (including registered antler wasters) were recovered from all phases of activity associated with Building 200 (see **Appendix 4**). This represents the largest and most varied of all feature assemblages recovered from the site (**Table 133**). The majority however were recovered from phase 3 (see below; **Figures 101** and **108**). Analysis by broad functional category reveals a particular abundance of artefacts associated with the categories of heavy processing (37.3%), containing (21.6%) and cutting tools (15.4%) (**Figure 102; Table 134**). There is also a significant occurrence of artefacts associated with the categories of personal ornament (10.9%) and textile production (8.3%). Conversely, relatively few artefacts are associated with the category of other (6.5%) and the category of ideology/ritual is not present. A number of the other features analysed from the site (below) have a higher proportion of heavy processing tools but it is standard across the site to see this category in greatest abundance; however, the high number of cutting tools is only matched by Pit 16. The considerable quantity of reconstructible pottery vessels is also unique at the site and is considered further below. Stone artefacts comprise over two-thirds of the assemblage from Building 200, the majority of which are complete (**Table 135**). Artefacts of pottery (10.7%), bone (8.9%), antler (5.3%) and shell (6.5%) occur in relatively low proportions. Bone (86.7%) and antler (86.4%) artefacts are largely fragmentary.

Results of the analysis of the total assemblage in terms of condition reveals that most of the finds are complete (59.5%). In turn, a consideration of the broad functional categories by condition reveals that those artefacts associated with the categories of textile production (92.9%) and personal ornament (71.9%) have the highest proportions of fragmentary artefacts. This latter situation is strange in light of the completeness of other categories. However, given the pattern established by the assemblage as a whole, and by other assemblages at the site, there is no evidence to suggest that this is the outcome of human decision-making. Therefore, it is probably a reflection of post-depositional fragmentation occurring to more fragile materials of bone, antler and shell. The category of containing has the lowest proportion of fragmentary artefacts (27.4% broken) followed by heavy processing (27.8%). There is a notably low fragmentation rate for cutting tools (32.7% are broken). This occurrence of intact cutting tools (predominantly axes manufactured from hard igneous rocks) is unparalleled in the other features.

As observed above, four main phases of activity have been distinguished. The most productive phase (phase 3) is that associated with the final occupation of the building. A consideration of condition by phase demonstrates that for phases 1-3, intact and fragmentary artefacts occur in an approximately 1 to 1 ratio. Only in phase 4 does the ratio slip below 1 to 1 (intact to fragmentary). Indeed in the case of phases 1 and 3 there are marginally more intact than fragmentary artefacts, a situation that is probably the product of the operation of very different cultural processes.

A total of 52 artefacts are assigned to phase 1. The majority belong to the heavy processing category (59.6%), followed by the categories of containing (19.2%) (that includes a higher number of stone vessel fragments than during any other phase) and other (9.6%) (**Figure 102**; **Table 136**). Altogether there is an overwhelming preponderance of stone artefacts (90.3%) with less than half (44.7%) being broken. The proportion of fragmentary artefacts is relatively low (46.2%), with the highest proportion of fragmentary artefacts being associated with the categories of textile production (100%), containing (80%), other (80%) and cutting tools (75%); the lowest proportion is found amongst artefacts associated with the heavy processing category (25.8% broken). Stone artefacts comprise the bulk of this assemblage (90.3%), a slight majority of these are complete (**Table 137**).

The majority of the artefacts recovered are between 5 and 10cm (**Figure 103**; **Table 130;** see also **Table 147**). A significant number are between 10 and 20cm. Only a small number are smaller than 2cm and none are greater than 20cm in length.

Explanation for artefactual patterning in terms of material, broad functional category and condition may be related to aspects of curation and expediency obtaining to the treatment of artefacts at the point of discard and abandonment. In the case of 200, phase 1, the majority of artefacts were of an expedient character (61.2%) (**Table 138**). These expedient finds were predominantly recovered complete (70%), whereas the bulk of the curated finds were fragmentary (68.4%). In particular, many expedient artefacts were recovered from the fabric of the structure; thus, their inclusion in the building inventory is as construction material. A similar explanation may be proffered for the occurrence of stone vessel fragments associated with the category of containing that also most commonly occur in the structural fabric of the building.

Phase 2 produced the smallest number of artefacts, with an assemblage totalling 30 finds (**Figures** and **104; Table 133**). The majority of these are associated with the categories of heavy processing (60%) followed by containing (13.3%), personal ornament (10%), other (10%) and cutting tools (6.7%) (**Figure 105; Table 139**). The fragmentation rate is higher than it is for phase 1, with 56.7% of artefacts being recovered broken. The highest proportions of fragmentary artefacts are in the categories of personal ornament and containing (100%) followed by other (66.7%) and cutting tools (50%). The category of heavy processing has the lowest fragmentation rate (38.9% broken). The majority of artefacts were of stone (86.7%) followed by shell (10%) and bone (3.3.%) (**Table 140**).

The majority of the artefacts recovered are between 5 and 10cm (**Figure 106**; **Table 130**). A significant number are between 2 and 5cm and 10cm and 20cm. Only a small number are smaller than 2cm and none are greater than 20cm in length. A slim majority of the artefacts were of curated form (53.3%) (**Table 141**). The bulk of these were recovered broken (81.3%). Conversely, the bulk of expedient finds were recovered complete (83.3%).

Phase 3, associated with the final occupation prior the destruction and collapse of the building, was the most productive of all the phases, yielding a total of 231 registered finds (**Figures 101** and **107**). The assemblage includes a broad range of artefacts, the majority of which were recovered intact (65.4%). The most numerous category was that of heavy processing (29.9%), followed by the categories of containing (24.2%) and cutting tools (18.6%) (**Figure 108; Table 142**). However, there was also a significant occurrence of artefacts associated with personal ornament (12.1%) and textile production (10.4%). In keeping with earlier phases the majority of artefacts are of stone (62.8%), although these occur in slightly smaller proportions while pottery (14.3%) and bone (10.4%) artefacts occur in larger proportions (**Table 143**). The majority of pottery (100%) and stone (74.5%) artefacts were recovered intact, however artefacts of less durable materials (e.g. bone, antler and shell) were predominantly recovered in fragmentary condition.

The highest rate of fragmentation is demonstrated by the latter categories (75% and 91.7% respectively) a reflection perhaps of the fragility of the material of manufacture. The lowest fragmentation rates are for the categories of containing (8.9% broken) (as it appears that the large number of sherds represent a significant number of reconstructible pottery vessels) and heavy processing (21.7%) followed by cutting tools (28.9%). The pattern shown by the first and last of these is unusual for the site and worthy of later comment. The second follows a general trend seen in other features.

The majority of the artefacts recovered are between 10 and 20cm (**Figure 109**; **Table 130**). However, there is a notable occurrence of artefacts of less than 2cm and more than 20cm. The bulk of the phase 3 assemblage comprises curated artefacts (69.6%), the majority of which are complete (58.3%) (**Table 144**). A larger majority of expedient finds are recovered complete.

Phase 4, associated with the destruction and gradual erosion of the structure, proved the least productive phase, yielding a total of 25 artefacts. Furthermore, in contrast to the preceding phases, phase 4 produced a higher proportion of fragmentary artefacts (68%). The majority of artefacts are associated with the category of heavy processing (29.2%) followed by personal ornament (17.4%), containing (13.8%), other (8.3%), cutting tools (7.4%) and textile production (7.4%) (**Figure 110; Table 145**). This suggests that there are some clear distinctions to be made between the assemblages deposited at the close of the final habitation phase (that is possibly a product of deliberate action) and that from the later phase, associated with the possible reuse of the abandoned structure. The highest rate of fragmentation is found in the categories of textile production (100%) and personal ornament (80%) followed in turn by cutting tools (66.7%), heavy processing (62.5%) and containing (50%). A slight majority of the small number of finds recovered from phase 4 are of stone (56%), however artefacts of bone (16%) and shell (16%) occur in greater proportions than in the preceding phases (**Table 146**). The majority of artefacts of all materials were recovered in a fragmentary condition.

Most of the artefacts recovered are between 2 and 5cm (**Figure 111**; **Table 130**). A significant number are between 5 and 10cm and 10cm and 20cm. Only a small number are smaller than 2cm and none are greater than 20cm in length. The majority of finds from the phase 4 assemblage are classified as curated (60.9%), the bulk of these are fragmentary (85.7%) (**Table 147**). In contrast, a slight majority of the expedient finds are complete (55.6%).

Overall, the proportion of curated versus expedient artefacts for Building 200 is comparable to that found in a number of the other features. However, a much higher percentage of curated artefacts were still intact and serviceable. As is the case with other feature assemblages, the percentage of intact expedient artefacts is also high. In fact the percentage of intact versus fragmentary expedient artefacts is higher than that of the other major Chalcolithic features at the site (e.g. Pits 1 and 16). In view of the extraordinary events that led to the destruction and preservation of the building, and of the assemblage it contained, other reasons might be supposed to have contributed to the creation of these proportions of complete versus broken artefacts.

BUILDINGS: SUMMARY

Clearly, Building 152 and 200 differ considerably in terms of their form, construction, age, assemblages and the evidence of prolonged occupation (and reoccupation). Given that there are only two structures of very different character and rather different age there is limited scope for comparisons to be made between the two. Furthermore, in themselves they provide little grounds on which to base wider conclusions concerning the character of settlement at the site during the Early and Middle Chalcolithic.

However, notable similarities between the structures extend to the (re)use of artefacts for construction and the survival of artefacts as fixtures or fittings. When the multiphase nature of Building 200 is considered, Building 152 reveals the greatest degree of similarity with Building 200 phases 1 (construction) and 2 (first occupation) and the least similarity with phase 3. Indeed, the latter is markedly different in terms of range, abundance and condition of finds. Thus, though the evidence is limited, it may be conjectured that there is some difference in the way in which structures are abandoned during the Early Chalcolithic and Middle Chalcolithic occupations at the site.

7.6.3 Multiphase Pits 1 and 16

Given their complex multiperiod character, Pits 1 and 16 are analysed separately from the other negative features at the site (see **section 7.6.4**). They are both of Early Chalcolithic date and constitute two of the richest features excavated at the site, the richest being Building 200.

Pit 1

Pit 1 (**Figures 93**, **112** and **113**) is a large, irregular, multi-phase pit that measures 7m at its widest point and 1.9m at its deepest. Erosion and ploughing have removed the uppermost layers of the pit and the ancient ground surface; furthermore, the west and north part of the pit have been truncated by a track. The edges of the hollow with the exception of the missing west side are almost vertical with a narrow ledge running in an irregular band around the surviving circuit of the hollow. The base of the hollow is a fairly level but slightly dished surface with a deeper oval hollowed area 2.30m in length along its east-west axis and 1.60m wide lying at its other end. A later concentration of human bone had been inserted roughly central to this smaller internal hollow. Five phases of occupation have been identified (Peltenburg et al. forthcoming; see **Table 149**).

A total of 166 registered artefacts and a large quantity of sherds were recovered from Pit 1 making this one of the richer features excavated at Mylouthkia (**Figure 114**). Analysis by presence/absence reveals a broad range of classes (**Table 150**). When considered in total (regardless of phase) it is clear that no single broad functional category dominates the assemblage. The most numerous category is that of other (28.9%), followed by the categories of textile production (20.5%), containing (18.1%), heavy processing (14.5%), cutting tools (7.2%), ideology/ritual (6.6%) and personal ornament (3.6%) (**Figure 115**; **Table 151**).

Stone artefacts are most common (48.2%) followed by those of pottery (25.3%); however there is a notable occurrence of bone (7.2%) and antler (19.3%) artefact. A number of the latter are clearly wasters from craft working (e.g. antler debitage) and hence are outside the remit of the study (**Table 152**).

Over four fifths of the assemblage is fragmentary (81.3%) (**Figure 115**; **Table 151**). Consideration by broad functional category and condition reveals that those artefacts associated with categories of ideology/ritual and containing have the highest fragmentation rate (100% each), followed by other (90.3%) and textile production (79.4%). Speculative explanations for the condition of the former might include the deliberate fragmentation, though contextual evidence to collaborate this is not present. The condition of containing equipment is a reflection of the considerable number of stone vessel fragments and the general absence of reconstructible containers of pottery or stone. Included within the category of other are many artefacts that are unidentifiable by virtue of their condition. Artefacts associated with personal ornament (33.3%) followed by those associated with heavy processing (41.7%) have the lowest rate of fragmentation. The former are often heavily fragmented in other pits at the site, possibly because of the high proportion of fragile bone, shell and antler used for manufacture of beads so here the pattern is unusual. However, it should be born in mind that the assemblage is small and easily skewed by chance or random factors as a result. The latter follows a pattern established in other contexts at the site and reflects aspects of curation and expediency as will be discussed further below.

As noted above, there have been at least 4 and probably 5 phases of activity in Pit 1 and there is little doubt that these varied significantly in character (**Table 149**). There is also little doubt that these phases themselves contain but a palimpsest of the range of activities and depositional events that occurred. Data analysis and interpretation of the most productive phases of activity in Pit 1 (e.g. Phases 3 and 4) produce some evidence of qualitative and quantitative similarities and differences in the composition and condition of their associated assemblages.

A total of 48 artefacts were recovered from phase 3. The largest category is that of other (31.3%), followed by textile production (22.9%) and containing (20.8%) (mainly stone vessel fragments) (**Figure 116; Table 153**). The high occurrence of miscellaneous objects reflects the high rates of fragmentation that make it difficult to allot certain artefacts to even broad functional category. Artefacts associated with heavy processing are also in relative abundance (14.5%), however artefacts associated with the categories of personal ornament (4.2%), cutting tools (4.2%) and ideology/ritual (2.1%) have low occurrences. The majority of finds recovered are of stone (47.9%), but pottery and antler finds also features in relatively high proportions (25% each) (**Table 154**).

When considered by condition, the categories of containing, ideology/ritual and other have the highest fragmentation rates (100% broken). A majority of artefacts associated with the category of textile production are also broken (72.7%), whereas artefacts associated with personal ornament (50%) and heavy processing had lower fragmentation rates (28.6% broken).

The majority of the artefacts recovered are between 2 and 5cm and 5 and 10 (**Figure 117; Table 130**). A significant number are between 10 and 20cm, however there are no artefacts smaller than 2cm or greater than 20cm. In addition, a significant majority of finds from the phase 3 assemblage are classified as curated (75%), the bulk of these are fragmentary (87.5%) (**Table 155**). In contrast, a majority of the expedient finds are complete (62.5%).

Phase 4 produced a total of 68 artefacts and also proved the most productive of sherds. Analysis by broad functional category reveals that artefacts associated with the category of other (26.5%) are most numerous followed by containing (22.1%) and heavy processing (19.1%) (**Figure 118; Table 156**). There is a slightly higher occurrence of ideology/ritual (10.3%) than in the earlier phase but similarly low occurrences of cutting tools (4.4%) and personal ornament (2.9%). The majority of these finds are of stone, followed by pottery (**Table 157**). Artefacts of antler are also in relatively high proportions. The bulk of artefacts of all materials are fragmentary.

Overall there is a lower proportion of fragmentary artefacts than in Phase 4 than there is in Phase 3 (67.6%). Analysis of broad functional category by condition reveals the highest rate of fragmentation amongst artefacts associated with containing and ideology/ritual (100% broken). In addition, artefacts associated with the categories of other (88.9% broken), textile production (80% broken) and cutting tools (66.7% broken) reveal a relatively high rate of fragmentation. Artefacts associated with heavy processing (53% broken) and personal ornament 50% all reveal a relatively low fragmentation rate.

The majority of the artefacts recovered are between 2 and 5cm and 5 and 10 (**Figure 119**; **Table 130**). A significant number are between 10 and 20cm and a small number are smaller than 2cm or greater than 20cm. As with phase 3 above, a significant majority of finds from the phase 4 assemblage are classified as curated (74.6%), the bulk of these are fragmentary (85.4%) (**Table 158**). Conversely, a majority of the expedient finds are complete (64.3%).

Phase 5 yielded 47 finds (**Figure 120**; **Table 159**). Artefacts associated with the categories of other (29.8%) and textile production (27.7%) are most numerous, followed by cutting tools (14.9%), containing (10.5%), heavy processing (8.5%), personal ornament (4.3%) and ideology/ritual (4.3%). The majority of artefacts are of stone (46.8%) (**Table 160**). Pottery artefacts (88.9%) demonstrated the highest fragmentation rate, followed by those of antler (81.8%), bone (80%) and stone (77.3%).

Analysis of broad functional category by condition reveals the highest rate of fragmentation amongst artefacts associated with the categories of other, containing and ideology/ritual (100% broken). In addition, artefacts associated with the categories of textile production (76.9% broken) and cutting tools (71.4%) reveal a relatively high rate fragmentation. Artefacts associated with heavy processing (25% broken) and personal ornament (100% complete) produced low fragmentation rates.

The majority of the artefacts recovered are between 2 and 5cm and 5 and 10 (**Figure 121**; **Table 130**). A significant number are between 10 and 20cm and small number are smaller than 20cm, however none are greater than 20cm.

As is the case for phases 3 and 4, the majority of artefacts from phase 5 are classified as curated finds (83.8%), the bulk of which were fragmentary (74.2%) (**Table 161**). The relatively high occurrence of curated artefact classes and/or fragile materials has probably significantly contributed to measures of fragmentation (see also below).

In all of the three main phases curated artefacts outnumber expedient by more than 2 to 1. In terms of condition however it is apparent that over half of expedient artefacts within each phase are intact and serviceable, in contrast to less than a quarter of those of curated form. At a simplistic level this implies that, for all phases within Pit 1, curated forms are more likely to be broken and defunct on deposition than are expedient forms. As a result, it is possible to predict that those phases or contexts that contain a large proportion of curated or well made forms are more likely to produce the highest rates of fragmentation and the greatest evidence of multi-functionality, reuse and recycling. These aspects will be considered in relation to other features later. In respect of artefact size (taking the largest dimension for analysis), the total average for finds by phase indicates that phase 4 produced the largest artefacts, followed by phase 3 with phase 5 producing the smallest total average size of artefacts (**Tables 130** and **162**). When considered by condition, phase 4 again produced the largest average size for complete artefacts whereas averages for broken artefacts are pretty similar across the 3 most productive phases. The average size of curated versus expedient artefacts reveals that in phase

4 curated artefacts also tend to be larger than for phases 3 and 5 where the average size is similar. However, for expedient artefacts phases 3 and 4 indicate broadly comparable averages with phase 5 producing the smallest average size for expedient artefacts.

Pit 16

Pit 16 is large sub-circular pit or hollow which was originally 7.00m long by 6.50m wide surviving for a depth of up to 1.60m (**Figures 93** and **123**). Modern quarrying activity and erosion has virtually removed all of the west edge of the pit and about one third of its original contents as well as completely destroying the prehistoric ground surface from which it was dug. The surviving sides of the pit to the south are either quite vertical or slightly bell-shaped sloping down to a fairly regular and smooth flat base. There is a low ledge stretching along the south-west perimeter of the base of the pit.

A number of the contexts are multilayered; subsequently, material collected from such contexts are probably product of multiple depositions (see **Figure 123**). This fact has manifest ramifications for the study of the artefactual component recovered from such contexts. The foremost is the resultant lack of any data that might have been prescribed to *in situ* activity and primary discard. Indeed, in the absence of any installations or other evidence of habitation in the form of, for example, postholes or true living surfaces, it is natural to assume that the deposits are in large part the product secondary refuse practices. Subsequently, the association of artefactual evidence with specific activities or behavioural episodes, whilst invariably problematic for most archaeological contexts, is in this case impossible. Five main phases of activity can be detected in the surviving stratigraphy of the pit (see **Table 163**).

A total of 293 registered artefacts were recovered from all phases and contexts associated with Pit 16, making it the second most productive Early Chalcolithic feature from the site (after Building 200). The assemblage as a whole presents a broad and varied repertoire of different artefact types (including artefacts for containing, heavy processing, cutting, sewing, and adornment). This diversity is similar to that of Pit 1 when the two are compared simply in terms of the presence/absence of key artefact classes (see **Table 164**), however there is a particular abundance of heavy processing equipment and cutting tools. The most abundant category of is that of heavy processing (34.5%), followed by cutting tools (19.1%), other (16%) and textile production (11.6%) (**Figure 124; Table 165**). There are also significant occurrences of artefacts associated with containing (9.2%), and personal ornament (6.1%). Artefacts associated with the category of ideology/ritual have the lowest occurrence (9.2%). The abundance of cutting tools is only matched by the assemblage recovered from Building 200 (see above). The categories of textile production and personal ornament also figure in greater abundance that in Pit 1. There is an overwhelming predominance of stone artefacts (74.5%), followed by artefacts of bone (10.2%), pottery (7.8%) and antler (6.8%) (**Table 166**). The highest fragmentation rates are amongst bone (90.3%), antler (86.4%) and ceramic (83.3%).

Over two thirds (67.6%) of the finds are fragmentary. The category of ideology/ritual (100%)

has the highest proportion of fragmentary artefacts followed by other (96.4%), cutting tools (85.2%), textile production (83.3%), containing (71.4%) and personal ornament (57.1%). The majority of artefacts associated with the category of heavy processing are complete (63%).

As noted above, five main phases of activity have been identified in Pit 16. Only two have proved particularly productive, namely phases 3 and 4, yielding 148 and 116 artefacts, respectively (**Figure 123**). However, phase 2 (n=23) also produced an assemblage worthy of note, principally for comparison with later phases.

The small assemblage from phase 2 naturally reveals a low occurrence of all broad functional categories and a notable absence of heavy processing artefacts (**Figure 125; Table 167**). This absence is unusual when compared to other phases in this feature and other contexts at the site, although the small size of the assemblage as a whole does weaken the probability of this being meaningful in terms human agency. The largest category is that of textile production (43.5%) followed by personal ornament (17.4%), cutting tools (17.4%), other (17.4%) and containing (4.3%). The predominance of the first category (together with the significant count for personal ornament) is reflected in the material proportions that show a high proportion of bone artefacts (34.8%) followed by stone (30.4%), antler (26.1%) and pottery (8.7%) (**Table 168**). The absence of heavy processing equipment and greater occurrence of bone and antler tools might also be considered to have impacted on the overall high proportion of fragmentary artefacts (82.6% broken) particularly amongst artefacts associated with textile production (90%) and personal ornament (75%) (**Figure 125; Table 167**).

The majority of the artefacts recovered are between 2 and 5cm (**Figure 126; Table 130**). A significant number are between 5 and 10cm and a number are smaller than 2cm and greater than 20cm, but none were between 10 and 20cm. A large majority of the finds from phase 2 are classified as curated (86.4%), the majority of which are fragmentary (73.7%) (**Table 169**). The majority of expedient finds are also fragmentary (66.7%).

Phase 3 proved the most productive in Pit 16. Analysis by broad functional category reveals a high proportion of artefacts associated with the categories of heavy processing (36.5%), other and cutting tools (18.2%), hence there is (overall) a high proportion of stone artefacts (77%) (**Figure 127**; **Table 170**). The categories of containing (9.5%), textile production (8.1%), personal ornament (4.7%) and ideology/ritual (4.1%) all have relatively low occurrences. Consideration of broad functional category by condition reveals that the highest fragmentation rate is amongst the categories of ideology/ritual (100%), other (96.4%), cutting tools (85.2%), textile production (83.3%) and containing (71.4%). By and large this patterning conforms to a pattern seen in the majority of other features and in the case of the latter category contrasts markedly with the pattern seen in Building 200. The lowest fragmentation rate belongs to the category of heavy processing equipment (37%) followed by personal ornament (57.1%). When considered in terms of material the highest fragmentation rate is for artefacts (or wasters) of bone (88.9%), antler (83.3) and pottery (83.3%), the lowest is for stone (62.6%) (**Table 171**).

The majority of the artefacts recovered are between 5 and 10cm (**Figure 128**; **Table 130**). A significant number are between 2 and 5cm or 10 and 20cm, however only a small percentage are greater than 20cm or smaller than 2cm. The majority of the finds from phase 3 are classified as curated (68.5%), the majority of which are fragmentary (74.1%) (**Table 172**). The majority of expedient finds are complete (64.1%).

Phase 4 also proved relatively productive, yielding a total of 116 artefacts. Overall the assemblage is similar in its diversity to that of phase 3 but there is a marginally lower proportion of fragmentary artefacts (65.5%). Analysis by broad functional category demonstrates a predominance of heavy processing equipment (38.8%) and cutting tools (19.8%) and a relatively low occurrence of all other categories (**Figure 129**; **Table 173**). This is reflected in the proportions of material occurrence. The most fragmentary category is that of textile production (91.7%) followed by other (86.7%), ideology/ritual (75%) and cutting tools. The category of heavy processing has the lowest rate of fragmentation (46.7% broken) - albeit slightly higher than in phase 3 – followed by personal ornament (60%) and containing (66.7%). Artefacts of stone comprise the bulk of the assemblage, the majority of which are fragmentary (as are finds of other materials) (**Table 174**).

The majority of the artefacts are between 5 and 10 followed by those between 10 and 20cm (**Figure 130**; **Table 130**). A significant number are between 2 and 5cm, however only a small number of finds are greater than 20cm or smaller than 2cm. As is the case for phases 2 and 3, the majority of the finds from phase 4 are curated (62.5%) and most of these are fragmentary (72.3%) (**Table 175**). A small majority of the expedient finds are complete (53.8%).

Consideration of the artefactual assemblages from each phase by the averages produced for their largest dimension reveals that, overall, phase 4 produced the largest artefacts, with phase 2 producing the smallest by a considerable margin (**Table 130**). Average size for complete versus broken artefacts indicates a similar pattern with a particularly marked difference between phase 2 and phases 3 and 4 in the case of fragmentary artefacts (**Table 176**). Finally, a similar pattern is seen with curated and expedient artefacts; phase 2, being generally unproductive of the latter, showing a contrary pattern to the normal situation that generally reveals expedient artefacts to be larger on average than curated artefacts. Overall, for all phases, curated artefacts are over three times more likely to be fragmentary (and, thus, probably defunct in terms of their original purpose) only approximately half of expedient types are (**Tables 169, 172, 175;** see discussion below). This is a pattern that is repeated in other contexts from the site.

MULTIPHASE PITS: SUMMARY

Pits 1 and 16 are broadly comparable in terms of their form and their age. They are also both witness to prolonged and multiple phases of activity. However, there is evidence of notable differences in terms of the character of activity, as Pit 1 has produced evidence of occupation and use as a grave pit.

Comparison between the two assemblages reveals that there are no strong similarities between the pits in terms of the composition of assemblages. Indeed, there are marked quantitative and qualitative differences. Thus, for example, Pit 16 proved far more prolific of finds and produced rather different proportions of certain categories (notably the categories of other, heavy processing, cutting tools and containing). A larger proportion of the total assemblage from Pit 1 is also fragmentary. Conversely, when other material categories are considered, Pit 1 produced a considerably larger number of sherds and faunal remains but a smaller quantity of chipped stone (**Table 201**). The strongest similarity between assemblages, in terms of broad functional categories, is found between Pit 1 phase 4 and Pit 16 phase 3; the greatest dissimilarity exists between Pit 1 phase 4 and Pit 16 phase 2.

7.6.4 OTHER PITS AND NEGATIVE FEATURES

The decision to include a consideration of other negative features and their assemblages within the same body of analysis is motivated by the fact that these - by and large - produce smaller assemblages than those considered individually above. They are also grouped together because many appear to share similar characteristics, they are often smaller than the others considered here, they were predominantly excavated in the first campaign of excavation and they are invariably of limited stratigraphic complexity. Nevertheless, patterns of deposition that they contain assist the wider discussion of the other features analysed above and - by extension - of activity at the site of Mylouthkia.

PITS 2A-B

Pits 2A and B were only partly excavated and were located as a group of pits along the edge of a track cutting. The first comprised a straight-sided flat-bottomed *c.* 0.80m wide with a surviving depth of 0.50 m. The second lies 0.40 m to the south of 2A and is slightly larger measuring 0.95 m wide by 0.72 m deep with steep sides and a flat bottom. No artefacts are recorded for 2A and only 4 artefacts were recovered from this Pit 2B, belonging to the categories of textile production (2), containing (1) and heavy processing (1).

PIT 24/28

Pits 24 and 28 are considered here together, because as a result of their truncation by quarrying and road cutting, it proved impossible to determine whether these pits were indeed distinct or part of a larger pit (**Figure 131**). Together they measured some 8.5 metres long by 3.5 metres wide and survived to a maximum depth of 58m. Layers consisted of a mix of grey ashy soil and crumbly brown soil that had slumped into the pit (naturally?). These were interspersed by finer lenses of grey ash with heat-cracked stones and silicates. These levels produced quantities of pottery and bone.

A total of 49 small finds were recovered from all contexts excavated with pits 24 and 28, but the majority are provenanced to the former (37). All broad functional categories were present, however the majority of finds belong to the heavy processing category (44.9%), followed by the of categories of other (18.4%), textile production (14.3%) and containing (12.2%) (**Figure 132**; **Table 177**). Cutting tools were least common (2%) followed jointly by artefacts associated with personal ornament and ideology/ritual categories (4.1%). There is an overwhelming majority of stone artefacts; a slim majority of these were broken (**Table 178**).

When considered by condition, the fragmentation rate is relatively high (67.3%), with certain categories being represented by no complete artefacts (e.g. personal ornament, cutting tools, ideology/ritual and containing) and others being predominantly recovered in a fragmentary nature (e.g. textile production (85.7% broken) and other (88.9%broken)). The category of heavy processing has the lowest fragmentation rate with a large proportion of complete (63.6%) as opposed to broken (26.7%) artefacts.

The majority of the artefacts recovered are 5 to 10cm in length (**Figure 133**; **Table 130**). A significant number are between 2 to 5cm and 10 to 20cm, however are greater than 20cm or smaller than 2cm. An equal proportion of curated and expedient artefacts were recovered from Pits 24/28 (**Table 179**). The majority of curated finds are fragmentary (76.2%) whereas the majority of the expedient finds were recovered complete (66.7%).

Pit 100

Pit 100 is substantial hollow feature some 4.5m long by 3.5m wide and surviving for a depth of 0.50m (**Figure 131**). Natural erosion had operated on the upper layers and recent bulldozing had truncated the western side of the feature, obscuring the relationship between pits 100, 101 and 102. Four superimposed stratigraphic units were defined within pit 100. The basal layer showed evidence of a surface with trampled sherds in the western part of the hollow indicating some activity inside the pit. Fills consisted of mixed havara, clay and midden (?) material.

A total of 36 finds were recovered from Pit 100. Artefacts associated with the category of heavy processing are most numerous (38.8%) followed by containing (19.4%), other (19.4%), textile production (8.4%), ideology/ritual (8.4%) and cutting tools (5.6%) (**Figure 134**; **Table 180**). Most of the finds are of stone and the majority of finds, regardless of material category are fragmentary (**Table 181**). Three-quarters of the assemblage is fragmentary. The categories of cutting tools, ideology/ritual and other have the highest fragmentation rates (100%) followed by containing (85.7%) and textile production (66.7%).

The majority of the artefacts recovered are between 5 and 10 and 10 and 20cm (**Figure 135**; **Table 130**). A significant number are between 2 and 5cm and small number are greater than 20cm, however none are smaller than 2cm. A majority of the artefacts recovered from Pit 100 are of curated form (58.1%), the bulk of which are fragmentary (83.3%) (**Table 182**). A slight majority of the curated artefacts are also fragmentary (53.3%).

Pit 102

Only a portion of Pit 102 survived measuring some 2.8m long by 1.35m wide and 0.6m deep; its western extent had been bulldozed away (**Figure 131**). The feature comprised a flat-bottomed hollow that probably cut Pit 100 (above). The base of the pit had been trampled and faint evidence of possible post emplacements around the edge of the depression indicating that it might have been roofed.

A total of 8 registered finds were recovered from Pit 102 (including a catalogued piece of worked antler). Two finds are associated with the category of containing the rest with that of heavy processing. With the exception of the worked antler all the recorded finds are of stone and three of the 8 were fragmentary including those from the category of containing. All finds are between 5 and 10 and 10 and 20cm in their longest dimension; none are smaller than 2cm or greater than 20cm. It is notable that all of the artefacts from the category of heavy processing are of expedient form and the majority of these are complete.

Ditches 105/106 and 107

These features were only partially excavated and comprised a length of ditch that was eroded as a result of gullying in places (**Figure 136**). Substantial quantities of Early Chalcolithic material were recovered, however the recovery of sherds of Late Bronze Age White Slip pottery prompted the excavator's interpretation of these features as belonging to the late second millennium BC. It is possible that they formed part of a system of land boundary or drainage ditches (Peltenburg et al. forthcoming b) of a later date, however continuing rescue excavations at Mylouthkia have exposed further ditches filled with Early Chalcolithic material. Thus, there is some uncertainty in the dating of the features considered here and every possibility that they were created during the Early Chalcolithic.

A total of 64 finds were recovered from 105 and a further 12 from 106. In the case of the former the majority of finds are associated with the category of heavy processing (57.7%) followed by cutting tools (18.7%), containing and other (8.4% each) (**Figure 137**; **Table 183**). There were only two artefacts associated with the category of personal ornament and a single find belonging to the category of textile production. Most finds recovered from Ditch 105 are of stone (**Table 184**). A clear majority (70.2%) of the recovered finds are fragmentary. The highest rate of fragmentation exists amongst artefacts belonging to the categories of textile production, containing and other (all 100%), followed by cutting tools (91.7%); the lowest fragmentation rates are for the categories of personal ornament (50%) and heavy processing (54%).

The majority of artefacts are between 5 and 10; although a significant proportion are also between 10 and 20cm (**Figure 138**; **Table 130**). An equal proportion of curated and expedient artefacts were recovered from the limited excavation of Ditch 105 (**Table 185**). The overwhelming majority of curated finds are fragmentary (89.7%). A rather smaller majority of the expedient finds were recovered fragmentary (58.6%).

Of the small assemblage from 106, the majority of finds belong to the category of heavy processing (66.7%) followed by cutting tools (25%); there was a single occurrence of an artefact from the category of containing (**Figure 139**; **Table 186**). A majority of artefacts are fragmentary (58.3%) with the highest fragmentation rates amongst the categories of containing and cutting tools. All finds are of stone and the majority of were recovered in a fragmentary condition (**Table 187**).

The majority of artefacts recovered are between 5 and 10; although a significant proportion is also between 10 and 20cm (**Figure 140**; **Table 130**). A small number are between 2 and 5 and greater than 20cm, however none are smaller than 2cm were recovered. Most of the finds recovered from Ditch 106 are of curated form (58.3%), the majority of which are fragmentary (71.4%) (**Table 188**). All of the expedient finds are complete.

A total of 49 artefacts were recovered from 107. This assemblage comprises artefacts associated with the category of heavy processing (53%), followed by the categories of containing (20.4%), cutting tools (14.4%), and other (8.2%) (**Figure 141**; **Table 189**). There are also single occurrences of artefacts associated with the categories of textile production and ideology/ritual. An overwhelming majority of artefacts recovered are of stone (**Table 190**).

Over three quarters of the assemblage is fragmentary. Ignoring the single fragmentary artefact from the category of textile production, the category of containing produced the highest proportion of fragmentary artefacts, followed by cutting tools and other. The majority of heavy processing finds are also fragmentary, whereas the single figurine from the category of ideology/ritual is complete. The majority of artefacts are between 5 to 10; a significant proportion is also between 10 to 20cm (**Figure 142**; **Table 130**). A small number were between 2 to 5 and greater than 20cm, however none are smaller than 2cm. A slight majority of the artefacts from Ditch 107 are of curated form (53.2%), the bulk of which are fragmentary (84%) (**Table 191**). A majority of the expedient finds are fragmentary (68.2%).

PIT 108

Pit 108 constitutes a large shallow hollow feature approximately 6.6m long by 3m wide by a maximum of 1.1m deep (**Figure 143**). The feature produced evidence of only one fill through its depth. As a result, the excavator concluded that it was probably infilled in a rapid and deliberate fashion. There was no definitive evidence of *in situ* activity in the form of fixtures and fittings or other evidence of habitation within Pit 108. To the northwest, Pit 108 cuts into Pit 109 (see below).

A total of 97 artefacts were recovered from Pit 108 during the course of its excavation. The assemblage includes a broad range of artefacts (**Table 192**), however when viewed by broad functional categories it is clear that certain categories are represented by single finds (e.g. personal ornament, textile production and ideology/ritual) (**Figure 144; Table 193**). As a result, they are of limited value statistically. The most abundant category is that of heavy processing (49.4%) followed by cutting tools (20.6%), containing (14.4%) and other (12.4%). The majority of artefacts are of stone

(88.7%), followed by pottery (9.3%), bone (1%) and antler (1%) (**Table 194**).

A large proportion of the assemblage is fragmentary (73.2%). Analysis of broad functional categories by condition reveals some similarities with Pits 1 and 16 above with the highest fragmentation rates amongst the categories of containing (92.9% broken) and cutting tools (85%). In the case of the former this reflects the high proportion of stone vessel fragments within this category. In the case of the latter this follows a pattern seen in other contexts from the site and discussed further below in relation to issues of curation and expediency. Artefacts associated with heavy processing produced the lowest proportions of fragmentary artefacts.

The majority of artefacts recovered are between 5 to 10 (**Figure 145**; **Table 130**); significant proportions are also between 10 to 20cm. A small number are between 2 to 5 and greater than 20cm, however none were smaller than 2cm are recovered. When the further division of curation and expediency is considered in combination with complete versus damaged or broken artefacts a further pattern emerges (**Table 195**). A slight majority of those artefacts eligible for these classificatory divisions are of a curated form (51.2%), the bulk of which are fragmentary (86%). A rather smaller majority of expedient finds were also recovered in a fragmentary condition (53.7%). In other words, whereas curated artefacts are over three times more likely to by fragmentary and defunct in terms of their original purpose only approximately half of expedient types are recovered in a fragmentary condition. This is a pattern that is repeated in other contexts from the site (see discussion below).

PIT 109

Pit 109 is situated close to 108 and is of similar (though larger) form, comprising a shallow scoop measuring approximately 7.5m long, with a maximum depth of 1.35m (**Figure 143**). Unlike the latter, 109 was never fully excavated however it did produce evidence of more than one phase of infilling. Again, as with feature 108, there was no evidence of *in situ* activity in the form of evidence of structures or of burial.

A total of 122 artefacts were recovered from of Pit 109. Analysis of artefact occurrence in terms of presence/absence indicates that the assemblage is not as varied as that from Pit 108 (**Table 196**; see also **Table 192**). Consideration by broad functional category reveals a particularly high proportion of artefacts associated with the category of heavy processing (57.3%) followed by containing equipment (25.4%) (predominantly stone vessel fragments), cutting tools (6.6%), other (6.6%) and ideology/ritual (4.1%) (**Figure 146**; **Table 197**). There is a notable absence of artefacts associated with the categories of personal ornament and textile production; these are known from a number of other features at the site (e.g. Building 200 and Pits 1 and 16 considered above). The overwhelmingly majority of artefacts recovered from Pit 109 are of stone (94.3%); more than two-thirds of these are fragmentary (**Table 198**). Analysis by condition reveals the highest fragmentation rate for the category of containing (100%) followed by the categories of cutting tools (85.7%), ideology/ritual (80%) and other (70%). The category of heavy processing produced the lowest fragmentation rate (52.2% broken).

The majority of artefacts recovered are between 5 to 10 and 10 to 20cm in length (**Figure 147**; **Table 130**). A small number are greater than 20cm, however none smaller than 2cm were recovered. When the further division of curation and expediency is considered in combination with complete versus damaged or broken artefacts a further pattern emerges. As with 108 above, curated artefacts are over three times more likely to by fragmentary and defunct in terms of their original purpose whereas only approximately half of expedient types are (**Table 199;** see discussion below).

OTHER PITS AND NEGATIVE FEATURES: SUMMARY

Analyses of a number of the other negative features above reveal some similarities and differences in terms of their assemblages. For example, it is clear that a number of assemblages vary considerably in terms of find quantity and quality. Thus, while certain features have yielded significant small find counts (e.g. Pits 108 and 109), others produced only limited counts (e.g. Pits 2A-B, 8 and 102). Similarities are to be found between the more prolific of the other pits and negative features in the proportions of fragmentary artefacts, the predominance of certain categories (e.g. heavy processing) and the occurrence of curated forms (and their condition).

Comparisons between these assemblages and those from the buildings and multiphase pits will be undertaken in the following section. Here, however, the heterogeneity of the various pits and other features in terms of the evidence of activities, multiperiod use, and the artefactual assemblages that they produce is of some interest. This variety might be related to the organisation of the settlement or to different loci of activity; equally, the variation might be related to more subtle attitudes and meanings attached to the treatment of contexts, artefacts and towards the site itself.

7.6.5 COMPARISONS: PATTERNING SIMILARITIES AND DIFFERENCES BETWEEN CONTEXTS

Taken as a whole it is clear that the material recovered from the site consists of a vast range of artefacts and materials including intact, broken and worn artefacts and some debitage from manufacturing activities. However, there are considerable similarities and differences to be noted in the patterning of artefact deposition at Mylouthkia. These comprise both qualitative and quantitative similarities and differences, and they exist between different structures, between different pits, and between structures and pits. For example, a number of features are particularly rich in small finds others are less so. These patterns of occurrence are probably the result of a variety of natural and cultural agents. Given the absence of horizontal stratigraphy, distinctions between features might well relate to many separate phases of occupation. Of particular note is the general pattern of other finds in relation to small finds, the richest features in terms of registered artefacts are generally the richest in terms of sherds and chipped stone; however there is also some variation to the patterning in these materials (**Figure 148**; **Tables 200** and **201**).

Similarities and differences are outlined below in four sections that summarise and compare results between assemblages in terms of broad functional categories, condition, size and curated versus expedient artefacts.

Broad Functional Categories

Consideration of broad functional categories together with materials of manufacture reveals that, at the most general level, the total assemblage from all features analysed is notable for the predominance of ground stone artefacts associated with the categories of heavy processing, cutting tools and containing. Clearly, artefacts of ground stone fulfilled a vast range of functions essential to every day living including the processing of foodstuffs, the cutting and carving of wood, the storage of materials and a host of other activities involving hammering, pounding or grinding actions. Such a variety uses for artefacts of stone may be correlated with the abundance of coarse stone over artefacts of other materials. A second factor in the survival of ground stone artefacts lies in the durability and inorganic nature of the stone. This point is returned to below, in connection with factors of condition and curation and expediency. Ground stone artefacts are well preserved where bone artefacts for example will not be. Even pottery artefacts are vulnerable to degradation and fragmentation where ground stone artefacts are not. A third reason for the high occurrence of ground stone has to do perhaps with size. Ground stone artefacts tend to be larger (particularly, as they are not so easily broken as artefacts of less durable materials might be) and to a certain extent size can be related to recovery in the record. Equally though size can be detrimental to artefactual survival in the archaeological record whereby in the past ground stone artefacts (particular those of unusual rock type or well-made form) being larger than other classes were more likely to be retrieved. Although it is the case that less well-made ground stone is largely unattractive in aesthetic terms it might have, nevertheless, been useful perhaps for other utilitarian purposes (e.g. for hammering, grinding). This brings us to the fourth reason for the high occurrence of ground stone, namely that curate behaviour acts both to skew proportions of ground stone types within an assemblage and to greatly reduce the proportional occurrence of artefacts manufactured from other materials. This point will be returned to later.

Artefacts associated with the category of personal ornament generally have a limited occurrence at the site and are absent in a number of the features analysed above (e.g. Building 200 phase 1, Ditches 105/106 and 107, and Pits 24/28, 100, 109). The category of heavy processing is the most common and frequently the most numerous of the categories represented in the assemblages. The exceptions to this pattern are Pit 1 (phases 3-5) and Pit 16 phase 2. Artefacts associated with the category of cutting tools are also commonly occurring but are less abundant than heavy processing artefacts. They have particularly high occurrence in Building 200 (especially phase 3), Ditches 105-7 and Pits 16 (phases 2-4) and 108. The category of textile production has a relatively low occurrence in many feature assemblages and is absent in Building 152, Building 200 phases 1 and 2, Pits 108, 109 and Ditch 106. Pit 1 has the highest proportions of artefacts associated with the category of textile production. The category of ideology/ritual has a low occurrence across the site and is absent from many contexts (e.g. Buildings 152 and 200, Ditch 105/106 and Pit 108). The category of containing comprises a significantly high proportion of assemblages from Building 200 (especially phases 1 and 2), Pits 1 (especially phases 3 and 4), 100 and 109, and Ditches 106 and 107. The occurrence of miscellaneous other is most significant in Pit 1 (phases 3-5).

Utilising the Robinson coefficient, the comparison of small find assemblages from the contexts analysed above reveals a number of similarities and differences in terms of the occurrence of the various broad functional categories (**Table 202**). These are best summarised according to the sequence of analysis, beginning with the buildings followed by the multiphase pits and finally the other pits.

Building 152 reveals strongest similarities with phase 2 of Building 200 and pits 105, 109 and 108 in that order. Conversely, this structure shows the greatest degree of dissimilarity with Pit 16, phase 2, followed by Pit 1, phase 2.

Taken as a whole the assemblage from Building 200 shows the greatest similarity with Pit 16, phase 4 and with the total assemblage from Pit 16 (especially Pit 16, phase 3); the greatest dissimilarity is with Pit 16, phase 2. When considered by phase, Building 200 sees the greatest degree of similarity between its own phases 1 and 2. Phase 1, in turn, reveals greatest similarity to Pits 109, 105, 108, 100 and dissimilarity with Pit 1, phase 5. Phase 2 reveals the greatest similarity with pit 109, Building 152 and pit 108; the greatest dissimilarity is with Pit 16 phase 2, Pit 1 phase 5 and Pit 1 phase 3. Building 200, phase 3 reveals greatest similarity to Pit 16 (especially Pit 16, phase 4 and – to a lesser extent – phase 3). There is also a marked similarity between Building 200 phases 3 and 4.

Pit 1 reveals that the greatest similarity is to be found between phases 3 and 4 and between phases 3 and 5. Beyond this the next strongest similarity is to be found between Pit 1 phase 4 and pits 100 and 105. Greatest dissimilarity is to be found between Pit 1 phase 5 and Pit 109, Building 200 phases 2 and 1, Building 152 and Pits 105 and 108. There are also marked dissimilarities between Pit 1 phase 4 and Pit 16 phase 2, and between Pit 1 phase 3 and Building 200, phase 2 and Pit 109.

Pit 16 reveals that the greatest similarity is to be found between phases 3 and 4. As a whole the assemblage bears greatest similarity to Building 200 (especially phase 4), Ditch 105 and Pit 100. Considered by phase Pit 16, phase 3 shows greatest similarity to Pits 100 and 24/28, Building 200 phases 4 and 3. Pit 16, phase 4 shows a marked similarity with Pits 24/28, 100 and 108, Ditch 105 and the total assemblage from Building 200 (but especially phases 3 and 4). The most marked dissimilarity is to be found between Pit 16 phases 2 and 4.

With respect to the other pits, Pit 24/28 shows greatest similarity with Pits 100, 16 (phases 3 and 4) and Building 152; the greatest dissimilarity is with Pit 16 phase 2. Pit 100 reveals the most marked similarity with Pit 24/28, Pit 16 (especially phase 3), Building 200 phase 1 and Pit 1 phase 4. The strongest degree of dissimilarity is with Pit 16, phase 2.

Ditch 105 shows the strongest similarity to Building 200, phase 2, Pit 16 (especially phase 4) and Building 152; greatest dissimilarity is with Pit 16, phase 2 and Pit 1 (especially phase 5).

Pit 108 shows the greatest degree of similarity with Pit 16, phase 4, Building 200, phases 1 and 2 and Building 152. The strongest degree of dissimilarity is with Pit 1, phase 5.

Pit 109 shows the strongest degree of similarity with Building 200 phases 1 and 2. The greatest dissimilarity is with Pit 16 phase 2 and Pit 1 phases 5 and 3.

Condition

Overall there is a high degree of fragmentation. In the majority of cases fragmentary artefacts outnumber intact artefacts by between 3 and 4 to 1. The exception is Building 200 (to which we will return to later) where – for the assemblage as a whole - there is an almost equal division between fragmentary and intact artefacts. However, there are distinct differences between phases with the lowest rate of fragmentation, associated with the final occupation (and possible conflagration), and the highest associated with the first occupation phase and the very final stages of abandonment and collapse.

Consideration of fragmentation in conjunction with functional category demonstrates some general patterning across the site. For example, it is generally the case across the contexts that fragmentation rates are high for the majority of contexts and categories (with the exception of Building 200 as mention earlier). In the main, however, the categories of heavy processing and – to a lesser extent – personal ornament reveal lower fragmentation rates than the other categories. The highest fragmentation rates are seen for the categories of ideology/ritual, containing and other (a feature of the miscellaneous 'other' category is the inability to identify objects that are obviously worked because of their highly fragmentary and/or damaged nature). Cutting tools and textile production also reveal high fragmentation rates.

Size

Analysis of artefacts by their longest dimension across all contexts analysed above, reveals that there is a clear predominance of artefacts of between 5 to 10 and 10 to 20cm in length. With the exception of the Building 200 assemblage (especially that from phase 3), artefacts of less than 2cm and more than 20cm in length have either relatively low occurrences or are not represented at all.

Comparison of occurrence of artefacts by size shows that there are distinct similarities between some contexts and clear differences between others. However, it is unclear that these similarities and differences can be correlated with parallel patterns in the occurrence of artefact categories or differences in condition or curation. For example, comparison between Pit 1 phase 3 and Pit 16 phases 3 and 4 reveals that there is a close correlation in the occurrence of artefacts by their size and yet no such correlation can be made in terms of the composition of these assemblages (there are distinct differences in occurrence of heavy processing, cutting tools, textile production, containing and other) or indeed in terms of condition (Pit 1 reveals a significantly higher fragmentation rate than that for Pit 116).

Curated and expedient artefacts

There are a number of discernible patterns in the distribution and occurrence of curated and expedient finds. The majority of finds are classified as curated rather than expedient form; this is the case for buildings (both 152 and 200), multiphase pits (Pits 1 and 16) and other features (e.g. Pit 109). However, Pits 24/28 and 108 have a higher than average occurrence of expedient forms to curated forms. A similar pattern is seen in ditch 105.

For many contexts, there is also a clear correlation between the condition of an artefact and its curation. As noted previously, for most contexts the majority of finds were recovered in a fragmentary condition (B200 proving the main exception). However, it is generally the case that expedient artefacts are between 2 and 3 times more likely to be recovered complete than are curated artefacts. In some cases the difference is more marked (e.g. Building 200, phases 1 and 2, Pit 1 phase 3 and 4 or 108).

A further correlation can be seen between the average size of artefacts and their categorisation as either curated or expedient. Thus, comparative analysis of the main phases of Building 200 and Pits 1 and 16 reveals that, with the exception of Building 200 phase 3, expedient artefacts are on average larger than curated finds. This is perhaps unsurprising given the differences noted between the condition of curated versus expedient finds.

7.7 THE CHARACTERISATION OF ARTEFACTUAL DEPOSITION IN, AND ABANDONMENT OF, SPACE AT MYLOUTHKIA

From the summary and intrasite comparisons above it is clear that the patterning of the occurrence of artefacts has afforded a number of observations concerning the character of artefactual deposition at Mylouthkia. The principal foci of the following discussion are the reconstruction and identification of site maintenance and abandonment activities at the site. In particular, attention will be directed to interpretations regarding local strategies for the treatment of artefacts at their point of deposition. First, however, it is useful to reconsider the problems that beset such interpretations. As has been observed more than once above, it is immediately apparent that contemporaneity between the majority of features cannot be established (see, e.g. **section 7.5.2**). Consequently, they stand on their own and do not allow for the identification of synchronous or even broadly contemporaneous cross-feature strategies of site maintenance or abandonment behaviour. Furthermore, a number of features at Mylouthkia have provided rich assemblages that may be confidently considered to be the product of various and disparate activities associated with the habitation, abandonment and post-abandonment stages of site occupation. This variety of activity naturally creates confusion and impacts on our efforts to identify the role played by inhabitants in the formation of artefactual assemblages or reconstruct past social practices. Indeed, it clearly adds to the host of interpretations that are already possible from the analysis conducted above.

However, it is argued here that the various assemblages do represent some general site wide trends in artefactual deposition that suggest longer-term strategies. The bulk of material was recovered from pit and hollow features. If an assumption is made that the situation presented by the hollows broadly establishes a 'normal' – albeit varied - pattern of artefact deposition for Early Chalcolithic occupation at Mylouthkia, then the material can be used to sustain wider reconstructions concerning the character of the various maintenance and abandonment activities that produced this material. Attitudes to materials, forms and particular artefact classes might be outlined, providing data to supplement the information that they can provide of a broad range of subsistence and craft working activities. In other words, it is possible to reach some tentative conclusions regarding the treatment of certain artefacts and material utilising the attributes of broad functional category, material condition and size (see section above). Furthermore, cross feature comparisons allow for the recognition of similarities and differences between contexts and assemblages that in turn afford interpretations. Discussion will now turn to a consideration of artefact deposition across the site.

Working simply within the constraints of Schifferian terminology of primary, secondary, provisional or de facto refuse, for example, a few observations can be made from the preceding contextual analysis of the material from Mylouthkia (see **section 2.3.1**). First, as noted above, the stratigraphical and artefactual characteristics of many of the pits indicate that their fills are largely a mix of secondary refuse and natural deposition resulting largely from surface slopewash. Primary refuse activity, in the common use of the term, is difficult to establish for these negative features, particularly for those that are clearly of a multiperiod nature. This is in part the result of the resolution afforded by the recording and sampling strategies that were employed during their excavation. Primary acts of deposition can only be reasonably conjectured for the disturbed burials recovered, for example, in Pit 1. In the case of the latter, a reconstructible pottery vessel may be considered as associated with this act of structured deposition. Otherwise, despite the occurrence of hearths and postholes in both phases 3 and 4 of Pit 1, indicating some primary activity associated with habitation, there can be no clear attribution of primary refuse deposition in this or any of the other negative features of Early Chalcolithic date at the site (a point that will be reiterated in relation to the buildings discussed below). It is the structural elements themselves that in these instances provide the best evidence of such activity. The change(s) in use of multiphase features such as Pit 1 from habitation hollow to dump prevents the separation of material into primary and secondary (though it could be argued that such a distinction is impossible to make in less difficult circumstances also (see, e.g. Binford 1983; see **section 2.7**). In contrast to Pit 1 (and Pit 102) the majority of negative features produced more limited or no stratigraphic evidence of *in situ* activity. Instead, their fills contained a mix of ash, silt and natural wash and they – by and large – yielded far fewer finds, fewer pottery sherds and less chipped stone. Thus, little can be said regarding *in situ* activity or activity zoning for many of the contexts analysed from Mylouthkia; instead, discard, abandonment and curate behaviour present the best avenues for research.

As noted above, the pits and ditches analysed from Mylouthkia vary in form, depth of deposits and the duration of their use (and reuse). Many contain substantial (midden?) deposits of silt and ash, artefacts and ecofacts and a range of associated detritus; however they vary in terms of the stratigraphical evidence they provide of *in situ* activity. Thus, a number of features contain some evidence of quarrying in their initial construction, of habitation, of the deliberate disposal of the dead, and of a range of activities that might have been carried out within their confines. Other features lack such evidence, for example, the history of human activity associated with Pit 1 is complex and differs considerably from Pit 16 in that it contains strong evidence to suggest that activity actually took place within the hollow at certain points in time (see **section 7.6.3**). In order to understand better the distinct character of their respective artefactual assemblages it is clearly necessary to realise such contextual or stratigraphic differences. Thus, for example, if structures were present in Pit 1 and not in Pit 16 allowances should be made for the impact that this would have had on the character of the artefactual assemblages; although, a full measure of this impact is probably unachievable.

Pit 1 most eloquently demonstrates the way in which Early Chalcolithic occupation at the site involved the continuous use or repeated reuse of certain pits and hollows (see also Building 200 that is also situated in a hollow above at least 2 metres of earlier deposits). Such activity was responsible for the accumulation of substantial artefactual assemblages; it probably also resulted in the churning up of earlier deposits and the reclamation and recycling of artefacts (see below in regard to curation and expediency). Furthermore, it demonstrates the way in which this activity could - over time - involve transformations in the use or indeed meanings associated with particular features or areas. This pattern of occupation and artefactual deposition in Pit 1 is particularly intriguing in the context of theoretical insights raised in Chapter 3 (especially **section 3.3**) – it is also paralleled perhaps in the placement of Building 200 above a substantial depth of earlier deposits (see below). Most notably, the concentration of occupation and of deposition in specific locations may be closely linked to the inhabitants own changing conceptualisation and/or memory of past occupations at the site. In the case of Pit 1, for example, the life-cycle of occupation and deposition in this feature variously witnesses quarrying activity, habitation (and re-habitation), burial and the accumulation of large quantities of artefactual and ecofactual materials. These activities should not be necessarily be viewed in isolation; indeed, given that they take place within the confines of the same feature, it is useful to consider each in connection to the other. Thus, connections may be made between the habitation of this pit and the decision to bury an individual in its confines or to deposit large quantities of finds, many of which were fragmentary. In other words, the ancient inhabitants of Mylouthkia were cognisant of the history of this and other features at the site; some knowledge of the history of occupation and of deposition was a factor in later occupation or reoccupations (see, e.g. the discussion of the importance of history and of past to the attribution of meaning to places and to things in **section 3.3**).

There are a few key distinctions to be made between the character and use of the various pits and the similarities and contrasts that exist between these and the few structural contexts that were identified at the site. Building 152 affords the best comparison, in chronological terms, with the majority of the negative features identified at Mylouthkia. In addition, given its intangible and ephemeral character it might be considered akin to the structure that might have existed in Pit 1. One clear difference is that Building 152 is situated in the upper deposits of a slight hollow and does not have such an over burden of later middening or natural deposition to confuse reconstructions of the building phase. Nevertheless, it is similarly difficult to identify clear evidence of primary refuse deposition in this structure, as the artefactual component that may be assigned to the closing phases of its use is scanty. Indeed, Building 152's general paucity in terms of small finds (particularly in contrast to the later Building 200) indicates that the building might have been kept relatively clean during its habitation phase and abandoned with only a very limited assemblage (see **section 7.6.2** above; see also below). Alternatively, various processes could have operated to deplete the assemblage following the abandonment of the structure (i.e. curate behaviour (e.g. Binford 1973, 1977b, 1978; Hayden 1976; Schiffer 1987; Tomka 1993; **section 2.3.2**). Parallels at the site do not, unfortunately, afford verification of such treatment of structures. Evidence for *in situ* activity is provided by the presence of artefacts that have been used in the building fabric (e.g. as constructional material) or as fixed installations. As part of the original structure these arguably provide the best evidence of habitation phase use; subsequently, they also provide the best means for identifying the division of space and domestic activity within the structure during its occupation.

In the case of Building 200 the situation is rather different and certainly more complex than that seen in Building 152 (especially for phase 3). Like Building 152 there are elements of the artefactual assemblage that are built into the structure as fixtures, presumably a number of such artefacts were built in to be used *in situ* (e.g. a broken storage vessel, pivot stones or quern and mortar emplacements). In addition, the walls and render include both intact and fragmentary artefacts that have been incorporated into the building fabric as rubble. In particular, the earlier phase (s) of occupation of Building 200 bears some comparison with the assemblage from the final habitation and abandonment stages of Building 152 in its overall paucity and the predominance of heavy processing equipment. A broadly similar pattern is discerned in the final phases of Building 200 that is associated with the disintegration and ultimately the burial of the walls of the building. However, beyond these slight similarities between Building 152 and Building 200 phases 1, 2 and 4, it is clear that Building 200 has a greater wealth of evidence from which to infer past human activity.

With the occurrence of such a large and varied assemblage that includes a high proportion of intact or reconstructible artefacts, it is more tempting to make interpretations based on the principle of *in situ* activity. The evidence of catastrophic firing, and possibility of the unfortunate demise of a child in this burning episode, makes such interpretations all the more attractive. However, some doubts remain, for it is not certain that the building suffered catastrophic destruction nor is it certain that the destruction and abandonment of the building was such a rapid event. Nevertheless, the combination of artefactual and contextual evidence (including the presence of human remains) encourages interpretations that - if they do not involve a sudden and accidental firing of the structure - require consideration of the possibility that the destruction was planned as a symbolic act associated with burial and/or closure (there is a notable parallel to be made to the Burnt Village at Sabi Abyad (**Chapter 5**)). If this was indeed the case then the assemblage that was produced is valuable as a potential inventory of a domestic assemblage but this must remain open to question. For example, in the event that the building's destruction was intentional it is natural to conclude that there was an intention influencing the composition of the remaining assemblage; thus, it is possible that the assemblage gained elements that were deliberately introduced at the firing or lost some components that were purposefully removed (see, e.g. Chapman 2000a: 105-6; **section 3.3**). However, we cannot know if this was the case. Unfortunately, at Mylouthkia there are no other parallels to assist in the conclusion that this was a deliberate act of closure; although, a possible parallel exists in Building 3 (Late Chalcolithic) at the nearby site of Kissonerga-Mosphilia (Peltenburg 1998a) (there are also a number of investigations into deliberate house destruction outside Cyprus (e.g. Stevanovic 1997)). As noted above, a further intriguing feature of Building 200 is the fact that it is located within a hollow with at least 2m of deposition below that has produced the remains of at least one other earlier structure. Thus, although Building 200 is of a later date than Pit 1, like the latter it is the latest in a long sequence of occupation and deposition within a hollow.

Clearly, irrespective of the uniqueness and individuality of many of the features at Mylouthkia, it is possible to identify some general intrasite patterns to occupation at the site; likewise, it is possible to identify general intrasite patterns in the treatment of certain categories of artefacts at their deposition. These patterns in turn afford interpretations as the value or meaning attached to certain finds at their deposition; although, given the avoidance of detailed analyses of artefact classes such interpretations rest on the patterning of similarities, differences and associations between more general classifications of broad functional category, condition, size and curation. In the majority of contexts, the bulk of recovered artefacts are fragmentary. Many are also recovered in conjunction with large quantities of sherds, chipped stone and faunal remains all of which leads to the interpretation of such deposits as middens; the exceptions to this patterning are Building 200 and to a lesser extent Building 152. As noted in **section 7.4** above, there are distinctions to be made between the assemblages recovered from the various negative features. For example, there are clear quantitative and qualitative variations with certain categories occurring in markedly different proportions across the assemblages. The most marked differences are to be seen between the assemblages of Pit 1 and Pit 16. Without repeating these at length, variation in the occurrence of cutting tools, of sherd counts, faunal remains and chipped stone all imply marked differences in the origin or source of these materials (i.e. in the method and location of generation), and perhaps in the strategies and decision-making behind their deposition.

Altogether, the analysis of individual features and the intrasite analysis of the features as a whole suggest that factors of curation and expediency figure significantly in relation to the manufacture, maintenance, condition and deposition of artefacts at the site of Mylouthkia. Focusing first on the distinction between expedient and curated artefact forms (see **section 4.3.3** for definitions) a few broad intrasite patterns emerge in the treatment and condition of artefacts at deposition that appear to relate to their manufacture. For example, those of curated form commonly outnumber expedient artefacts. Where this is not the case numerous explanations can be invoked such as those that involve the inclusion of expedient artefacts in construction, the removal of material at abandonment or the depletion of assemblages after abandonment through the action of curate behaviour (or delayed curation) (see **section 2.3.2**). In general, there is a clear difference between the condition of curated and of expedient artefacts at their deposition, as expedient artefacts are more likely to be intact and still serviceable (it should be noted that Building 200 (in particular phase 3) constitutes an exception to the general pattern). Conversely, curated forms are more likely to be recovered in a fragmentary state than those of an expedient kind, regardless of the specific depositional history of a feature. It is generally the case that expedient artefacts recovered from the site are more likely to be larger in size than are curated forms. This is not simply a product of their functional differences in the 'systemic' context, as intact expedient artefacts are not of greater size than intact curated forms. Indeed, certain of the latter are amongst the largest recovered finds (e.g. pottery vessels or quern stones); larger than expedient forms such as hammerstones or pounders. Instead, these patterns are a reflection of differences in the condition of artefacts on deposition.

An explanation for the condition of curated artefacts is afforded by evidence that curated finds are more likely to show modification and repeated reuse in the same and/or another function. In other words, in terms of condition, curated forms commonly demonstrate more complex life-histories (see **section 3.3**). This is particularly true of the substantial ground stone assemblage from the site whereby, despite the ready availability of raw materials, curated forms invariably suffered greater fragmentation and reuse than expedient types. Interpretation of such differences as exist between curated and expedient forms at Mylouthkia in turn might be related to the value placed in them by the ancient inhabitants of the site. Indeed, drawing on theoretical insights raised in **Chapter 3,** such evidence might fruitfully considered in relation to the past human categorisation processes (see, e.g. Miller (1987)), and to the value attached to artefacts because of their apparent history of production, use and reuse (see, e.g. Chapman's (2000a) concept of presencing). Thus, whereas from a modern perspective ground stone artefacts manufactured from readily available materials and with relative ease (as experiments involving axe manufacture have suggested (Elliot pers. comm.)) might be quite dispensable on becoming worn or broken, for the ancient inhabitants of Mylouthkia this was not necessarily the case. Consequently, such curated artefacts were retained in order to be repeatedly reworked and reused in new ways. An additional factor in this maintenance of particular artefact forms and reuse (recycling) is the way in which artefacts were deposited in negative features that themselves have long histories of use and reuse, including transformations in the character and use to which they were put (e.g. Pit 1). Settlement at Mylouthkia clearly involved living with the past. Although, the site is ephemeral and the Early Chalcolithic occupation might well have been of a semi-permanent nature (see below) there is a considerable history to occupation at the site that was in all probability of varying significance to generations of inhabitants. Thus, the curation of artefacts and their deposition at the site was intrinsically linked to the way in which successive generations of inhabitants lived with the material remains of past occupations at the site.

Given the difference in period it is possible also to conjecture on reasons for the profound differences between features in terms not only of the physical characteristics of the structures and of features but also in terms of shifts and/or continuity in the character of human activity at the site. Thus, for example, the contrast between the characters of Early Chalcolithic occupation with its scant structural remains that produce relatively small assemblages and that of the Middle Chalcolithic

Building 200 is intriguing. Though the evidence of both periods at the site is largely limited to two structures in particular there are clear parallels for the latter at the nearby sites of Lemba-*Lakkous* and Kissonerga-*Mosphilia*. These parallels extend beyond evidence of structures meeting a catastrophic end, for it is common for unburnt Middle Chalcolithic buildings to yield substantial artefactual assemblages. This patterning in artefact deposition during the Chalcolithic (and indeed from the Neolithic) has been noted by others, particularly in respect of the contrast between settlements from these periods and those from the later Bronze Age (see, e.g. Peltenburg 1985b-c: 47; Peltenburg 1998a: 234-235). The differences in the character of settlements between the two periods may be a measure of differences in their permanence (see **section 8.3**). Thus, whereas the Middle and Late Chalcolithic period sites of Lemba-Lakkous and Kissonerga-Mosphilia are characterised by substantial architectural remains indicative of sedentary communities, the Early Chalcolithic settlement at Mylouthkia might well be indicative of a semi-sedentary social group. Nevertheless, if indeed the settlement at Mylouthkia was semi-permanent there is little doubt that a number of the features span several phases of occupation suggesting a degree of continuity in the settlement at the site. Furthermore, even if the settlement was semi-permanent and the structural remains scanty, the artefactual wealth of numerous pits and hollows is considerable. The multiperiod nature of the occupation, the richness of deposition and the heterogeneity of various features and their fills are clearly suggestive of complex and varied practices.

7.8 CONCLUSIONS: WIDER IMPLICATIONS FOR THE PRESENT STUDY

Mylouthkia is a difficult site to analyse and interpret at the intrasite level, consisting as it does of a scatter of artefactually rich features across a relatively large area; features that span not only centuries but also millennia (given the occurrence of aceramic Neolithic features that are not analysed here). As a case study, Mylouthkia also illustrates some of the difficulties of interpretation and analysis of artefacts when they are recovered from contexts that are difficult to excavate, contexts that lack 'concrete' architectural boundaries. The lack of horizontal stratigraphy and chronological relationships between features has been highlighted. These factors inevitably raise doubts as to whether or not different patterns that are witnessed across the site are significant of different behaviour or simply the product of different occupations. Clearly, as a result of such limitations it is not possible to reconstruct contemporary and differentiated or zoned activities at Mylouthkia at the broad intra-site level. However, it is possible to conjecture on a range of criteria that impact on the deposition of artefactual material and the abandonment of both artefacts and contexts.

In considering the site in terms of human action, it is therefore natural - and most straightforward - to consider each feature as a distinct entity. This is true even for those features (e.g. Pits 1 and 16) that have broadly contemporary radiocarbon dates and pottery assemblages. However, problems of chronology and stratigraphy also exist for individual features (e.g. Pits 1 and 16) that appear to represent multiple behavioural episodes that cannot be individually isolated. This equally has a profound impact on intrasite analyses of the artefactual material from the feature. Nevertheless, the preceding description and cross-contextual analysis of the features raises a number of avenues for investigation and interpretation within this study. Indeed, to a certain extent the disparate character of the features available for study provides an opportunity to explore the problems that arise in such scenarios. They also provide an opportunity to consider the merits of analysing artefact variables (other than simple typology) and how they stimulate different interpretations and understandings of the past. Thus, as a counter to refutations that are predicated on chronology alone, there are patterns that emerge cross-contextually that suggest patterning in the treatment and deposition of artefacts, regardless of the absence of exact synchronicity between features. In particular, the treatment of curated and expedient finds, and especially their condition on deposition, invites interpretations of a non-functional character (see, e.g. reference to Chapman's (2000a: 30) concept of presencing). Another observation concerns the heterogeneous nature of artefactual deposition across the site that is further suggestive of the complexity and historicity of human activity at the site, a complexity that is not readily explained by functionalist principles or modern notions of rubbish (see. e.g. **section 3.3** for discussion of the meanings associated with artefacts and their treatment at deposition).

In addition, the analysis and interpretation of artefactual deposition at Mylouthkia has a number of wider implications for the study and discussion of similarly ephemeral sites that may be comparable in terms of the nature of pitting activity, the presence of ephemeral structures or the abandonment of structures with large quantities of artefactual material that includes many intact finds. Looking ahead to the next chapter, one such issue that the settlement evidence from Mylouthkia touches on is that concerning the identification and interpretation of permanence. Thus, differences identified between the Early Chalcolithic and Middle Chalcolithic periods at Mylouthkia (and at nearby sites) may reflect the degree of sedentism or of settlement permanence. Although, the distinction between the two is not a clear-cut one, for clearly there is some indication of longevity to the earlier occupation at the site. Furthermore, the wealth of assemblages together with the treatment of artefacts and their deposition over several phases within the same features are not simply interpreted as evidence of the transitory nature of settlement. Indeed, to argue that the occupation at the site was of a semi-sedentary character is not to deny the possibility that the site retained some significance in the minds of its inhabitants when they left. The continued significance attached to the site can be inferred from the rich and varied character of artefactual deposition concentrated in the pits, hollows and ditches at the site (including the burial of the dead). Clearly, then, the distinction between Early Chalcolithic and Middle-Late Chalcolithic occupations in terms of their permanence is a complex one. Such complexity warrants further investigation and is of particular relevance to the later discussion of archaeological interest in sedentism (see, e.g. **section 8.3**).

CHAPTER 8

DISCUSSION

8.1 INTRODUCTION

In this chapter, the observations drawn from the preceding analyses chapters are opened to a wider discussion of the potential impact of cultural site formation processes on archaeological investigations of sedentism, urbanism, state formation and cultural interaction between social groups. The intention is not, however, to follow processualist authors by arguing that there are universal laws for the operation of cultural site formation processes and thereby normalise social acts, perceptions or intentions of past actors into a conglomerate that represents many different 'places' (Tringham 2000: 356). Indeed, the logico-positivist frameworks of New Archaeology that underlie much of the work of the Behavioural School of Archaeology of the 1970's and many recent ethnoarchaeological studies of site formation have been widely recognised as being flawed and are openly criticised in the present work (see **sections 2.6** and **3.2**). Instead, this study accords with the common post-processual conviction of the historically and contextually contingent character of archaeological remains; the very different character of the sites analysed in the preceding chapters clearly endorse this position.

In the first few sections of this chapter, the interpretations and conclusions reached in the intrasite analyses are discussed in the light of the recent literature on site formation processes referred to in **Chapter 2** and the theoretical and methodological concerns expressed in **Chapter 3**. In particular, there is a reconsideration of the archaeological assumptions underlying approaches to artefactual deposition and the use and abandonment of space. The second half of this chapter then moves beyond such issues of archaeological practice and theories regarding the use and abandonment of space to consider the import of this study for major archaeological concerns (or 'big' issues) mentioned above. Ahead of such broader discussions, however, it is useful both to recapitulate a number of the conclusions that were reached in the preceding analytical chapters and consider the three case studies comparatively, particularly in relation to ideas espoused in **Chapter 3**.

8.2 INTRASITE CONSIDERATIONS AND INTERPRETATIONS

As noted earlier (see **section 4.6**), each of the three case study sites offers a specific and individual situation for investigation and interpretation. Given the chronological, geographical and cultural differences between the sites this is perhaps unsurprising. In particular, it may be assumed that a host of both similar and distinctive formation processes have operated separately and to different effect on each site. Furthermore, the nature of the excavation procedures and level of recording of artefacts and contexts also clearly differs from site to site, and this has accordingly influenced the character and scope for analysis in this study (see **sections 2.5, 4.3.1**, **5.62**, **6.5.2** and **7.5.2**). It is also important to realise that the character of occupation at the sites differs greatly at both the physical and conceptual levels (see **section 4.1**). For example, Sabi Abyad (**Chapter 5**) comprises a relatively open plan farming settlement with fairly extensive and substantial architecture. In contrast, Jerablus (**Chapter 6**) may well have been open plan in its early stages (e.g. Late Chalcolithic and Pre-Fort Early Bronze Age) but for the majority of the later Early Bronze Age occupation the settlement was concentrated within the confines of a fortification wall. The former appears to have been of an agglomerative nature, formed of individual units that provide no clear indication of hierarchical or centrally planned intention. The latter on the other hand, with its fortifications, its monumental tomb, passageway and impressive entrance suggests the opposite. Mylouthkia (**Chapter 7**), however, differs from both Sabi Abyad and Jerablus. Its more eroded, ephemeral character and the absence of horizontal stratigraphy between features is suggestive of less permanence in settlement occupation and/or a greater degree of settlement drift. Although such statements concerning the character of the built environment at each site could be criticised as over-simplifications, it is probable that such differences not only affect archaeological investigations in terms of the physical preservation of structures and the demarcation of contexts, but also interpretations that take form from the very moment of excavation. Interpretations that in turn influence the retrieval and recording of the data.

Nevertheless, the three site analyses have stimulated a number of interpretations that can be considered together in order to achieve some broader statements regarding wider archaeological attempts to interpret artefactual deposition. First, however, it is useful to recapitulate on some of the key conclusions from the preceding analyses.

The analysis of contexts from Sabi Abyad prevents ready acceptance of Verhoeven's (1999; see also 2000a-b) conclusion that a number of the burnt Level 6 structures preserve secure *in situ* artefactual evidence of their original function (see **Chapter 5**). Instead, the majority provide evidence of a palimpsest of activities, including the deliberate deposition of material in certain rooms that remained open and/or accessible at, and after, they ceased to be used in their original function. Indeed, it is probable that while individual rooms fell out of use or changed in their use (say from food store to midden) other parts of the same structure continued in use. In other words, regardless of the fact that they were heavily burnt during the firing *event*, artefactual deposition within particular structures and/or rooms reflects something of the complex and changing *history* of their use (a point that can in turn can be linked to notions concerning the life-history (or biography) of artefacts considered in **section 3.3**). However, having concluded that the richest burnt rooms (e.g. Room 6, Building 6.II) might well have been treated as midden locations while other rooms continued to be occupied, they nevertheless differ significantly from other rooms within the same structures, and from the unburnt structures that were analysed. Furthermore, within certain of the richer rooms, there is a possibility that objects were purposively placed or left at the time of abandonment and/or destruction. For example, a number of rooms have yielded small clay figurines, all of which were fragmentary with a number showing clear evidence of having been deliberately 'killed' (e.g. room 6 in Building II or room 2 in Building XIV; see **section 5.7.2**). Several of the richer rooms have also produced some intact finds, particularly of ground stone, in contrast to the broad patterns of deposition witnessed in other contexts, such as the midden deposits of T12 (see **sections 5.7.2** and **5.8**). This complexity and variety of deposition – as well as the very nature of the firing event itself – points to the non-functional character of aspects of artefactual deposition, an observation that will be returned to below.

The patterning of artefactual deposition at Jerablus differs from that at Sabi Abyad and is markedly different from that seen at Mylouthkia. The character of the artefactual assemblages recovered from building contexts suggests a tight cleaning regime (see **section 6.5.3**). Given the evidence of site maintenance activity, and the absence of evidence to suggest that abandoned structures served as receptacles for discarded material, it is quite probable that material was discarded off site (e.g. at the Tell edge or on fields; see **section 6.7**). Where artefacts remain for recovery at Jerablus they generally appear to have been deposited (often inadvertently) in the fills of drains and passageways or intentionally in grave assemblages. Many artefacts were also deposited during the construction of buildings (see, e.g. Building 1000 in Area IV); others were also probably introduced as or with levelling material. Such variety in the character of artefactual deposition at the site naturally creates problems for the reconstruction of spatial function and the activities of past inhabitants. Nevertheless, the character of artefactual deposition at Jerablus – in particular the contrast between the structured acts of deposition witnessed in the burial of the dead and the treatment of the built environment – presents different interpretive challenges to the other sites and also suggests that there are non-functional aspects to artefactual deposition at the site (see below).

Kissonerga-Mylouthkia presents an equally complex site for the intra-site interpretation of the meaning and significance attached to (or decision-making behind) artefactual deposition. In particular, the multiperiod pits and hollows demonstrate the complexities involved in reconstructing the life histories of features that have undergone many changes in their usage over time (see, e.g. Pit 1 that appears to have been used for habitation, middening and burial). The nature of the data available does not allow microstratigraphical reconstruction of episodes of activity or dumping, however it does point to qualitative and quantitative variations in artefactual deposition that may in turn be related to differences in the histories of the various features. Indeed, the heterogeneous nature of the various feature assemblages (particularly those for the pit fills), in combination with the evidence of changing use and patterns of deposition over time, lend weight to wider archaeological discussions that focus on the applicability of modern notions concerning rubbish to the past (see **section 3.3**). Clearly, the pits and hollow features at Mylouthkia demonstrate the heterogeneity of deposits that might otherwise have been labelled homogeneously as 'trash' pits.

The few discernible structures at Mylouthkia also present other problems to interpretation. Thus, Building 152 proved ephemeral and unproductive of finds affording only limited material for analysis of artefactual patterning. Conversely, Building 200 proved remarkably productive, however several phases were identified and some ambiguity surrounds the character of the final abandonment of this structure (see **section 7.6.2**). Nevertheless, the poverty of the Building 152's assemblage is of interest as it indicates that the structure was left clean at abandonment or that little in the way of post abandonment (cultural) deposition occurred. Furthermore, evidence of installations marries with the use of artefacts as installations in the later Building 200. More can and has already been said regarding the latter structure, as the extraordinary character of artefactual deposition lends itself to the conclusion that it is *in situ*. However, despite the wealth of complete or reconstructible finds and the evidence of a catastrophic end to the building's life, there are parallels with structures on other nearby sites that suggest the possibility that there was some deliberate intention behind this structure's destruction. If it was the case that the building was deliberately destroyed rather than an unfortunate accident then a 'Pompeii' scenario cannot be assumed. In this respect, Building 200 at Mylouthkia could be considered comparable to certain burnt contexts at Sabi Abyad (e.g. Buildings 6.1 and 6.2; see **section 5.7.2**).

From contextual and artefactual analyses of the three case study sites then it is apparent that the majority of contexts present some interesting patterns and feed a number of possible interpretations regarding the treatment of artefacts and space at the habitation, abandonment and post-abandonment stages of site occupation but – as might be expected - they offer few secure conclusions. What is clear is that no simple depositional categorisation (e.g. involving primary, secondary, defacto, or provisional deposition) will suffice for the majority of the larger settlement contexts (e.g. architectural units such as buildings or rooms) considered in the preceding intrasite analyses. Many structures present great difficulties for those interpretations of primary use and everyday activity that are based on artefactual assemblages alone, not least because of the character of their abandonment, infilling, rebuilding and/or later reuse. In other words, structures have complex and varied life histories (see **section 3.3**). And yet, though structures and their fixtures can undergo modification over time, it is the case that they consistently afford a greater indication of primary function during habitation than the artefactual deposition that might take place on floors or in fills. Thus, for example, the presence of hearths, ovens or bins may be taken as directly indicative of *in situ* activity – and indirectly they may provide some indication as to the function of space. In contrast, portable finds constitute less secure indices of specific and primary activities (see, e.g. the Early Bronze Age fort occupation at Jerablus (**Chapter 6**) where the majority of rooms and buildings were left largely clear of finds on their abandonment). The difficulty presented by portable finds from structural contexts is related in large part to the difficulties of distinguishing between various stages of occupation and abandonment. Deposits within structures show characteristics associated with both accretion and depletion processes operating from the final stages of habitation through to the post-abandonment stage of a structure's life. The stratigraphic and chronological information lacks the resolution to either distinguish between occupation stages or to recognise specific episodes or events. As a result, the data cannot support synchronous spatial analyses. This is not simply a product of poor technique or recording; instead, it is an outcome of the complexity and variety of formation processes.

There is, however, little satisfaction in a conclusion that paints artefactual deposition and associated social practices simply in a negative light. Furthermore, contrary to Schiffer and like-minded authors (see, e.g. **section 2.2.1**), the patterning witnessed should not be dismissed as the random by-product of manifest and mechanical site formation processes (although, an element of random patterning might well exist) that distort the archaeological record. Turning the problem on its head, it is arguably the case that it is not the data that is at fault for being too weak or distorted to support those synchronic spatial analyses that seek to map activity areas and reconstruct the socio-economic organisation of a society; rather, it is the expectations that are placed on the data. Underlying archaeological expectations are a raft of assumptions and values concerning the nature and meaning of material culture, of society, of the archaeological record (and of contexts) and of human behaviour (see, e.g. **sections 2.6** and **3.3**). These expectations inform archaeological practice and limit interpretations. Such a realisation requires a reconsideration of the focus or goal of archaeological investigations and the questions that archaeologists ask of the material remains. It also requires new directions that emphasise the social, ideological or symbolic dimensions of human action in the interpretation of material culture. There is also a need to consider the temporal and/or historical dimension of human action – dimensions that are often made more difficult to comprehend as a result of archaeological categorisation (see **section 2.5**).

By placing less emphasis on the function of things and their primary loci of use and more on their condition and treatment on deposition or abandonment this study has clearly demonstrated the problems inherent in spatial analyses that are predicated on the assumption of primary *in situ* depositions and notions of utility, of convenience or of economic value. At all three case study sites the patterning of artefactual deposition across a variety of contexts frequently fails to correspond with such notions. For example, at Sabi Abyad the burnt Level 6 deposits (that were quite possibly the result of a deliberate firing episode) include rooms that relatively devoid of finds and others that are remarkably productive (see **section 5.7.2**). However, as noted above, these productive rooms yield a range of material; the bulk of artefacts were fragmentary at deposition but some artefacts remained intact and others (e.g. figurines) were probably deliberately defaced. Clearly, such variety and difference in the character of artefactual deposition across burnt and unburnt contexts is not simply be a reflection of functional differences in the use of space or of differences between primary, secondary or abandonment stage depositions that are motivated, for example, by Least Effort principles. Instead, it has been argued (see **section 5.8**) that the variety is – in part – the outcome of a variety of practices (and intentional human action) operating to different affect according to established ways of doing things in specific contexts (e.g. pits or dwellings) or circumstances (e.g. on the abandonmnet of a structure or the death of an individual).

Comparable conclusions regarding the non-functional character of artefactual deposition are reached in respect of the prehistoric settlement at Mylouthkia. Mylouthkia produced negative features that yielded rich assemblages of small finds and evidence of various activities as well as a structure (Building 200) that appears to have been abandoned (and possibly destroyed by fire though the evidence is ambiguous) with a large and intact inventory of finds including pottery vessels (see **Chapter 7**). Most notably, the heterogeneity of pit form and depositions invites interpretations that move beyond simple categorisations involving primary or secondary refuse, that are commonly based on general notions of convenience, replacebility, economic worth or utility. Thus, at Mylouthkia, patterning in artefactual deposition in terms of broad functional categories, materials, condition and curation suggest a complexity and variety to practices associated with the habitation and abandonment of individual contexts and artefacts. In particular, the patterning of curated versus expedient finds (most notably of ground stone) indicated the heavy use and reuse and fragmentation of curated find as opposed to expedient finds. Only Building 200 presents a notable exception to the rule. Curated finds also frequently constitute the largest proportion of finds in the pits, some of which produced evidence not simply of middening but also of habitation and burial. This concentration of well worked and well used artefacts in certain features, some of which also contain habitation possibly also indicates the closer or more intimate association between people and things than suggested by the cleaned out contexts at Jerablus (see below).

Only at Jerablus is it possible to argue that artefactual deposition in the majority of settlement contexts may correspond with modern (Western) notions of convenience, of replacebility or of economic worth (see **Chapter 6**). Perhaps in this respect it is no coincidence that the Late Chalcolithic/Early Bronze Age occupations at Jerablus are dated to a period that witnessed the development of urban sites and of state society in the region of the Upper Euphrates (see below). In other words, the structure and organisation of Early Bronze Age society was markedly different from that of Late Neolithic Northeast Syria or Early Chalcolithic Cyprus and directly impacted on local strategies involved in the abandonment of artefacts, structures and settlements. And yet, though the majority of contexts at Jerablus are clear of finds, there are exceptions. For example, the fabric of Building 1000 incorporated large numbers of querns and rubbers associated with the very grain processing activity that is documented from within the structure. In **section 6.6.4** the potential significance of the association was considered in the context of Chapman's (2000a: 30-31) concepts of grounding and presencing whereby artefacts associated with heavy processing activity in a particular building (or area) were reincorporated in the structure of the building at a later stage (see also **section 3.3**). Other contexts also produced evidence of deliberate infilling (incorporating cultural materials from elsewhere) that while serving practical purpose by creating level ground for new building might also have had an additional significance connected with the inclusion of past cultural materials (e.g. Building 516 in Area III; see **section 6.6.4**).

Of additional interest, in the context of the discussions of object meaning in Chapter 3 (especially **section 3.3**), is the sheer concentration of artefactual material found in the various contexts on the prehistoric sites (e.g. Sabi Abyad and Mylouthkia) that contrasts with that seen at Jerablus (although it should be noted that many of the Jerablus contexts produced large quantities of sherds). Chapman's concept of presencing (2000a: 30) is particularly apposite in the context of, for example, Pit 1 at Mylouthkia with its multiperiod character, evidence of a range of different activities and, more directly, the character of artefactual deposition across the phases (particularly in the patterning of curated/expedient artefacts; see **section 7.6.5**). Patterns in artefact curation and condition indicate different value invested in particular artefact categories, especially curated artefact forms. Furthermore, as noted above, the concentration of artefactual materials (including heavily fragmented curated artefacts) in pits and hollows that yield evidence of prolonged occupation and transformations in their use is itself of interest. Clearly, a number of these features were steeped in history, in memories and in traditions – not simply because of the presence of *in situ* evidence of habitation (after all the majority have not produced such evidence) but also by virtue of the material they contained. Thus, there is a temporal and historical dimension to contexts and artefacts at the site that itself is of crucial significance for our understanding and interpretation of past occupations, of social practices and of the worldview of ancient inhabitants.

From the similarities and distinctions that exist between different artefact categories in terms of condition and curation within and between features at the site of Mylouthkia, it can also be inferred that ancient categorisation processes embodied in various artefact categories differ from our own and indeed, at the cross-cultural/intersite level also differ (see **section 3.3;** Chapman 200a; Miller 1985). Similar arguments may be entertained for both Sabi Abyad (see **section 5.8**) and Jerablus (see **section 6.7**). Thus in the case of the former, for example, the concentrations of material in certain rooms of the burnt structures has been interpreted as evidence of complex depositional practices occurring prior to and probably also at the time of abandonment. Significant parallels with midden deposits suggest the patterning is in large part the outcome of comparable site maintenance strategies, however, certain differences such as the occurrence of intact items and the appearance of deliberate fragmented artefacts beg alternate interpretations. In other words, there is a time-depth to these deposits that is masked by the extraordinary event of the firing of the village. Although artefactual deposition at the later site of Jerablus suggests the mechanical and efficient implementation of site maintenance strategies and the rapid - even systematic - abandonment and rebuilding of occupation levels, the character of pitting activity at the site, the cutting of graves, the use of cultural material to deliberately infill structures or the use of artefacts in construction could also be interpreted as intentional or conscious inclusion of elements of the past in the present. In the process such 're-use' involved the renegotiation or transformation of meanings and values attached to contexts and artefacts.

In light of the discussion above, it is the case that patterning in artefactual deposition on the sites is best interpreted as the outcome of social practices that are historically and culturally contingent; the artefacts (structures and objects) and their treatment at deposition have specific social and symbolic meaning (see **section 3.3**). Furthermore, it is the articulation of abandonment behaviour (or practices) that potentially provides a more fruitful avenue for research into artefactual distributions than approaches that focus simply on reconstruction of the habitation stage. To assist in interpretations of the social meaning of artefactual deposition, a range of artefactual attributes have been explored and comparisons have been made across contexts and levels of occupation. These contexts and assemblages have also been contextualised – to a degree – through consideration of wider socio-political developments. Through adopting a mufti-scalar approach (from artefactual attribute to context to occupation level to site and so on) artefactual deposition can be interpreted in a new light and used to reconstruct historical interpretations in new ways. At Jerablus, for example, connections have been inferred between the abandonment of artefacts and structures, the infilling of buildings to build anew, the shifts from residential to cemetery use, the construction of a fortification wall and drainage systems, the raising of the height of the settlement above the alluvium, and the location on the west bank of the Euphrates, 4km south of Carchemish (see **sections 6.8** and **6.9**). Similarly, at

Mylouthkia the character of artefactual deposition and of contexts has been connected to the semi-permanent nature of occupation (see **sections 7.7** and **7.8**). However, the repeated use of the location, the multiperiod nature of some pit depositions, their heterogeneity in terms of deposits and evidence of activity, the burial of dead at the site and the probable existence of ditched enclosures are indicative of complex social practices. Furthermore, the heterogeneity of deposits together with the wealth of material in pits and ditches invites cross-cultural parallels to be made with recent archaeological approaches to Neolithic enclosures in northwest Europe or Iron Age pits (see also the work on the aesthetics of deposition in pits, e.g. Pollard 2001). In other words, the significance of artefacts and contexts is more than simply in terms of activity areas or functional use. Instead, they embody other social and symbolic meanings and their creation and treatment played a part in both the production and reproduction of society.

Clearly, then, the study of the non-functional character of artefactual deposition can afford new and potentially fruitful research avenues. But this potential will not be realised without an appreciation of the impact of existing assumptions on archaeological practice nor will it be realised without the requisite level of recording, data retrieval and reporting on sites. In the following section, the discussion will move on to address further some of the problems of existing archaeological assumptions raised above (see also **Chapter 3**).

8.3 INTERPRETING ARTEFACTUAL DEPOSITION: TACKLING ARCHAEOLOGICAL BIAS AND ASSUMPTION

Analyses from all three sites indicate the significant influence of various cultural formation processes on the character of the archaeological record. It follows from these and from a host of other studies (see **Chapter 2**), that the failure to try to recognise and to appreciate the myriad site formation processes that can have operated in the creation of contexts and assemblages can lead to mistaken assumptions, conclusions and interpretations.

In this section three interrelated areas of assumption or bias are considered in the light of the three case studies that relate to context(s) of analysis, the attribution of meaning to artefacts and the life history of artefacts.

Contexts of analysis

As was observed in **section 2.6,** there are clear biases in the foci of research into site formation processes. The bulk of studies (generally ethnoarchaeological in character) have focused on households during the habitation stage of their occupation (see, e.g. LaMotta and Schiffer 1999 and relevant references therein). A similar concentration on households is witnessed in investigations of artefactual deposition in the built-environment that neglect formation processes (see, e.g. the studies by Voigt and Daviau considered below). This is perhaps unsurprising as the definition of archaeological sites as settlements invariably rests on them being characterised as having largely domestic or residential functions; their recognition is therefore linked to the identification of domestic practices in the archaeological record (Brück and Goodman 1999: 3). In turn, the household as the focus of domestic practice has long been considered of central importance to settlement studies generally (see, e.g. Woolley 1954 [1930]: 76). Furthermore, the household has also long been considered as the most basic unit of society and, therefore, in evolutionary models the principal social group in small-scale societies. However, the archaeological identification of households can be problematic for structures may change in use over time or indeed the household of modern Western society might not be a universally applicable classification. Equally the adoption of such a classification can involve the imposition of those attributes common to Western social life; attributes that are not even reflected in *all* modern societies (Brück and Goodman 1999: 4; see also Tringham 1991a-b, 1995, 2000). For present purposes, it is unnecessary to delve further into debates over the strengths and weaknesses of archaeological assumptions that have been made concerning households. Instead, it should be emphasized that this interest in households underlies many studies of settlement including those that focus specifically on the examination of site formation processes. In the context of the contained case studies, the definition of space in terms of domestic or residential function versus storage (and other activity areas) is crucial to Verhoeven's (1999) socio-economic interpretation of the Burnt Village settlement at Sabi Abyad (see **sections 5.4.1** and **5.4.2).** And yet, the assumption of the existence of households in the past is not unreasonable, however a critical awareness of the attendant material or other associations that archaeologists make with households is necessary for they naturally fuel interpretations from the outset.

The interest in households (and in architectural elements in general) also fuels a bias in the focus of archaeological excavation, data collection and spatial analyses. Few archaeological and ethnoarchaeological studies of cultural site formation processes provide comparative investigations of 'households' *and* open areas *and* middens *and* other contexts (e.g. pits). However, from the preceding analysis it is clear that any settlement study that is concerned with investigating the organisation of space and nature of occupation (and re-occupations) will benefit from conducting comparative analyses of as many different structural and other contextual elements as are recovered (see also Needham and Spence 1997: 86). Investigating artefactual deposition across a site in this way can assist in the improved definition of separate areas or phases and allow for definitions that are not predicated simply on functional divisions, for example, between activity areas, storage areas or discard areas. On the contrary the investigation of artefactual deposition across contexts may be used to challenge functionalist assumptions and inspire non-functional interpretations of regarding the meanings attached to particular contexts, finds or (depositional) practices. Analysis of artefactual deposition across the site also facilitates the assessment of individual contexts as, for example, *in situ* or abandoned. The investigation of artefactual deposition across contexts of different form and character can also be used to consider (or reconsider) the meanings of the artefacts and of contexts themselves (in the past and as archaeological constructs). This is not to rule out the functional division of space in ancient settlements, it is simply to realise that spatial function in a modern sense might not be conceptually appropriate to prehistoric situations. This brings us to the next observation concerning the assumptions that underlie archaeological reconstructions of settlement and of artefact meanings and distributions themselves.

The meaning of things

Functionalist assumptions underpin many of the existing site formation analyses. Similarly, past studies of the use and abandonment of artefacts and space have also tended to utilise the terminology and theoretical frameworks of the processualist school of archaeology. This theoretical position has encouraged generalisations to be made concerning human behaviour and artefactual deposition, generalisations that frequently reflect modern value systems and ways of doing things. In **Chapters 2** and **3**, this study questioned the functionalism that is intrinsic to many extant studies of the built environment and site formation; with their estimation of human activity in terms of Least effort principles, resource availability, portability, usefulness, obstructiveness and so on. Although, an appreciation of the impact of site formation processes is of crucial importance to the validity of archaeological interpretations, the positivistic assumption of general laws of human behaviour (including cultural site formation processes) along such modern Western lines is clearly misguided. Likewise interpretations that are based on artefactual patterning in terms of the perceived 'use-life' function of an artefact are deeply flawed as they rest on the belief that the ancient function of an artefact conforms to modern notions. A concentration on such variables alone also clearly overlooks the import of symbolic, cognitive and social factors and also denies the individuality of human agents and of sites.

Within the present study the importance of artefact function has been given no greater significance than other attributes relating to material of manufacture, condition, size and curation. Instead, the application of broad functional categories only has served as a heuristic device designed to bring order to the data in order to facilitate the patterning of similarities and differences in the composition of context assemblages. This patterning has *not* been conducted with the aim of mapping contemporaneous areas of activity, such as domestic, craft working or storage areas; but rather with the aim of interpreting the differential treatment of artefacts and material in the conduct of site maintenance or the abandonment of contexts and sites. The intrasite investigation of other artefact properties (in particular their condition) in this way has assisted in the realisation, for example, that few contexts afford clear evidence of the primary depositions that traditional (synchronic) spatial analyses require. In addition, the recognition that structural contexts, for example, contain fills that are the product of a palimpsest of depositional episodes, activities and agencies casts doubt on the assumption of contemporaneity or synchronicity between spaces and their occupation.

Furthermore, a more holistic approach of this kind is necessary if a better understanding of the meaning(s) of artefacts and contexts is to be achieved. (It should also be noted here, in passing, that the analysis of a broader range of artefactual and ecofactual materials, and their associations, than that considered within this study could in addition provide valuable inferences). Such an approach facilitates a better understanding of the local strategies, social practices and attitudes involved in the treatment and deposition of artefacts. In turn, the identification of social practices related to the treatment of artefacts should be integral to reconstructions of the histories of sites and experience of past inhabitants:

> It is the very specificity of social practices - whether an act of deposition or the burning of a house full of domestic objects - that links the memory of the performance to the recollection of the time/place where it occurred and when. (Chapman 2000a: 190)

The life histories of artefacts

Crucial to the present emphasis on the meaning of artefacts and artefact deposition is the realisation of the specificity of finds and their contexts; both have unique histories. This realisation is integral also to contextual archaeology (see **section 3.2.3**); however, it is contrary to the processualist principles and frameworks that underlie many settlement studies. By ascribing an artefact to a particular function there is also a tendency to overlook the historical dimension that an artefact (structure or object) can possess. The failure to consider the importance of history is no accident; an ahistorical tendency runs through processualist theory and practice. This is seen, for example, in the ready use of ethnography and ethnoarchaeological studies and the eager search for the general (or laws) that are deemed to govern all human behaviour.

As a counter to ahistorical processualist doctrine, it was noted in **section 3.3** that a number of scholars have written regarding the biographies of objects and the need for archaeologists to consider the history of an artefact in order to achieve valid interpretations of its meaning and the meaning of its contextual or other artefactual associations (e.g. Gosden 1994; Kopytoff 2000: 379; Tringham 1995). To achieve such a heightened understanding, it is necessary to adopt a multifaceted approach that utilises a multivariate artefactual analysis based on observable characteristics (in terms of form, function, condition, material) and entertains multiple associations between context and artefacts. It is only through the application of multivariate artefactual and contextual analyses that issues relating to the 'history' and value placed in artefacts and contexts might be better perceived and debated. Thus, taking the example of Mylouthkia (see **Chapter 7**, especially **sections 7.6.5** and **7.7**), patterning of artefactual deposition across contexts in terms of broad divisions between curated and expedient finds suggests links between the life history of artefacts (and the likelihood that they will be curated, reused or recycled in another function) and the investment in their manufacture. However, the link is not necessarily to be explained in economic terms – the raw materials are readily available and their manufacture was not necessarily a time consuming or labour intensive process. Instead, the past associations of such artefacts (see **section 3.3** particularly inn respect of Chapman's (2000a) concepts of grounding and presencing)), together with the clear modification of form and finish that they have undergone, perhaps made their retention more likely on becoming broken or worn. Notably, in certain contexts curated forms at the site also comprise the largest body of finds – and at the same time reveal the greatest degree of fragmentation.

In the following section, discussion will move on to consider the implications of this study for wider issues. However, it is worth noting here that in the discussion of such major issues as sedentism or urbanism it is frequently the case that the variety and complexities of individual site histories and the role of individuals is over looked. Tringham (2000: 331) makes the important point that traditional archaeological discourse with its focus on major issues pertaining to cultural evolution often overlook or at the very least gloss over topics that focus on individual intentional action, on people, families, men, women, and children, believing such topics to have no relevance to the big picture. Hence, there is a need to be aware of cross-cultural generalisations and normative approaches serving as heuristic device rather than as reality (Tringham 2000: 331-2).

8.4 WIDER IMPLICATIONS FOR SETTLEMENT STUDIES

In this section, an argument is made for the inclusion of site formation studies - especially cultural transformations - not only in intra-site based analyses but also in broader inter-site discussions that are built on settlement studies. Wider issues obtaining to settlement archaeology are – for example - those of that concern the transformation from a mobile to a sedentary way of life or from village to urban communities. It is the author's contention that the investigation of site maintenance strategies and abandonment practices has the potential to contribute both positively and negatively to our interpretations of past societies, of ethnicity, cultural interaction and of social change. The negative contributions of site maintenance and abandonment strategies are those that are commonly cited. That is, such activities (or processes) can operate to confuse our investigations and interpretations of the associations between artefacts and contexts (see **sections 2.2**, **2.3** and **2.4** where an extensive literature on site formation processes has already been discussed). Particular difficulties are encountered in archaeological efforts to reconstruct *in situ* activity and the use of space through patterning artefactual deposition. On the positive side, it is argued below that socio-cultural change (whether sudden or gradual) may be witnessed in the organisation and practice of maintenance and abandonment activities and the treatment of artefacts (in their production, use, retention, deposition and their reuse). In discussing major issues such as sedentism, urbanism, state formation and ethnicity a number of examples of published sites are considered. It is important to note that these site examples are only dealt with briefly – with the slight exception of Khirokitia. Detailed reanalysis of material from each would not only prove a huge undertaking, it is also impossible given this study's reliance on (limited) published material only. However, the purpose is not to simply criticise the weaknesses of approaches and interpretations; consequently some alternative directions for research are suggested, other questions of the data are posed – if not answered – and hypothetical interpretations are afforded that would, for their validation, require more detail.

First, ahead of this wider discussion, a brief word is necessary regarding the fundamental impact of site formation processes on the chronological resolution of sites and cultures; and thus on archaeological understandings of social change. Site formation processes are widely understood to have a significant impact on the character of artefactual assemblages, their contexts of recovery and on relative chronologies that are built on typologies or stratigraphic associations. Such an understanding fuels - in part - archaeological distinctions between disturbed and undisturbed contexts or between primary and secondary depositions. Naturally, by affecting the chronological definition of contexts and assemblages they also impact on the archaeological interpretation of the timing and character of social changes.

Therefore, greater attention to the impact of site formation processes on settlement analyses can throw light on investigations of periods of societal change such as those referred to below. For example, at Arslantepe (SW Turkey), it has been observed that, whereas structures identified from pre-Uruk and Uruk period levels are built one upon the other in steady progression, the pottery appears to change rather dramatically (Frangipane 1993). However, abrupt changes from Local Late Chalcolithic to Uruk influenced pottery forms are not paralleled at other sites that see gradual typological changes (e.g. Algaze 1986; Thissen 1985). A situation that Frangipane suggests

> ...may at least be partly due to the limited size of the excavation areas and therefore to the lack of any clearly distinct building levels with well-defined architectural remains and a sufficient quantity of *in situ* materials to make it unnecessary to use material taken from the filling layers when considering pottery complexes. (1993: 138).

While this statement identifies the weaknesses that underlie others' pottery sequences (limited excavation area, ill-defined architectural remains and lack of *in situ* contexts), in so doing it illustrates a number of standard assumptions (e.g. of what is and is not *in situ*) and priorities (architectural levels). These are linked to long established archaeological principles (e.g. of stratigraphy or dating, using pottery sequences) (see **section 1.2**).

Sedentism

The origins of sedentism and the archaeological indices of a sedentary way-of-life constitute major fields of debate in archaeology, particularly the archaeology of early settlement in the Near East. This is not least because sedentism has been linked to the fundamental socio-economic changes that are associated with the adoption of farming (see, e.g. Bar-Yosef and Belfer-Cohen 1989; Tchernov 1991). At one time the development of permanent settlement was considered the (natural) outcome of the changes in subsistence strategies associated with cultivation and animal husbandry. More recently sedentary hunter-gatherer societies have been identified (e.g. the Natufian culture of the Levant) triggering interpretations that view settlement and the attendant socio-economic complexity amongst late Epi-Palaeolithic hunter-gatherer populations as a necessary precursor to the transition to agriculture. In essence, there has been an increasing focus on the domestication of humans wherein settling in villages and the construction of substantial architecture constituted a major change in the social, intellectual and psychological lives of people (Banning 2001: 33; see also Haaland 1997).

The established archaeological indices of sedentism are several, and include greater variety and quantities of artefacts, the presence of seasonal foodstuffs, an increase in heavy (non-portable) tools, evidence of storage, the existence of more substantial dwellings and the use of cemeteries (see, e.g. Rafferty 1985). However, it should be noted that the ability of archaeologists to read sedentism in the archaeological record of early settlements has been questioned (e.g. Edwards 1989; Wills and Windes 1989).

A review of ethnographic and ethnoarchaeological studies reveals a range of investigations and interpretations that could conceivably contribute to the archaeological elucidation of sedentism in a number of ways. For example, there are many studies that have focused on patterning artefactual distributions on sites belonging to modern non-sedentary (e.g. Binford 1977b, 1980) and sedentary societies (e.g. Kent 1984, 1990; Kramer 1979; Watson 1981) that could provide comparative data. There are other studies that have also been directed to providing measures of the accumulation of artefactual assemblages that may be correlated to duration of occupation (e.g. David 1972; de Barros 1982; Lightfoot 1993). Kent's (1999) ethnoarchaeological investigations into the distinctions between trash and storage areas on settlement sites are also of interest. Through such efforts to understand the archaeological indices of such very different behaviours as that of site maintenance and storage behaviour, archaeologists can then place themselves in a better position to investigate storage behaviour itself. This is of some importance, as the reconstruction of storage behaviour amongst human groups is of great interest to a number of theories and interpretations for social, economic and political change (e.g. D'Altroy and Earle 1985; Ingold 1983; Schwartz 1987; Testart 1982). Indeed, interest in the identification of storage areas and related social practices extends beyond studies of complex hunter-gatherer groups or early farming communities to studies of the origin and development of early states. Beyond the interest in storage or other indicators of sedentism and/or subsistence practices there is a growing interest in the symbolic or ritual dimension of the archaeological record of early prehistoric settlements. Sites of the Pre-Pottery Neolithic in particular, such as Göbekli Tepe, Nevali Çori, Çayönü or 'Ain Ghazal, have yielded a wealth of evidence of – for example – ritual buildings, the elaborate treatment of the dead or of representations of human and animal form on stele, walls or as portable art (see, e.g. Cauvin 1994; Kujit 2000; Özboğan and Başgelen 1999; Verhoeven 2002). Clearly, there is more to these early communities than traditional focus on subsistence, environment or activity areas allows for. It is also clear that the concern with the non-functional character of artefactual deposition, demonstrated in earlier analyses, is justified in the light of the rich symbolism of sites like the aforementioned.

Turning to published examples of early prehistoric sites in the East Mediterranean and Near East however it is clear that the potential of site formation study to illuminate past social practices remains largely untapped, particularly as it obtains to social practices involved in the treatment and deposition of artefacts and of contexts. Furthermore, attitudes to site formation processes and to artefactual deposition reflect processualist notions of efficiency, utility and economic value. There follows a brief consideration of published material from the sites of Mallaha (Israel), Khirokitia

(Cyprus) and Hajji Firuz Tepe (Iran). Of the three sites, Khirokitia receives the greatest attention by virtue of the quality of the ongoing excavations at the site, the quality of the publication and the existence of a spatial analysis by the excavator (Le Brun 1984). It should be reiterated that detailed reanalysis and reinterpretation of the sites (including Khirokitia) is not undertaken. Reliance of published syntheses prevents such an undertaking; consequently, emphasis is placed on highlighting areas of weakness and proposing potential new avenues for investigation.

Mallaha (Eynan), Israel

As a large open-air site of the Natufian period (Late Epi-Paleolithic), Mallaha has been widely discussed in the context of a culture that has yielded the first evidence of permanent settlements and of the intensive use of many of the wild progenitors of modern domesticates (particularly cereals). There is a consensus of opinion that the Natufian culture occurs at the transition between the Palaeolithic hunter-gatherers and the Neolithic agriculturalists and that it displays characteristics of both the Late-Epipaleolithic and Neolithic periods (see, e.g. Bar-Yosef 1983; Bar-Yosef and Belfer-Cohen 1989; Bar-Yosef and Valla 1991; Henry 1989; Valla 1988a).

Excavated initially in the 1950's and 1970's under the directorship of Perrot, and later by Valla, the site of Mallaha has been the subject of numerous reports and other publications (Perrot 1960, 1966; Perrot and Ladiray 1988; Valla 1981, 1984, 1988b). However, it should be noted that the quality of the earlier excavations and publications (particularly interpretation of stratigraphy) are suspect. Perrot (1993: 393) himself has stated that Mallaha 'provides the earliest known example of sedentary life in this country [e.g. Israel], and perhaps in the entire Near East'. As Boyd (1995: 19) has observed this assumption of permanence has coloured Perrot's interpretations, however, the material evidence of permanence is not clear. Boyd's (1995) reinterpretation of one structure at Mallaha in the light of mortuary evidence will be considered further below; first discussion will consider the work of Valla on the character of structures and artefactual deposition at the site.

In a series of publications Valla has directed his attention to the interpretation of the settlement at Mallaha (e.g. 1981, 1988b, 1991). The structures at this site comprise semi-subterranean circular dwellings built of timber, with evidence surviving in the form of stone packed postholes and an arc of stone. Structure 131 has witnessed particular attention, it is the best published and arguably the best excavated as, for the first time, material from the structure was wet sieved (Boyd 1995: 20; Valla 1981, 1988b, 1991). Two occupation floors were identified in this timber structure. The first produced 26 objects of stone (including pestle fragments and a polisher). The second later floor produced two hearths and yielded rather more material, including three discrete groups (including fragmentary and intact artefacts, chipped stone and faunal remains). Pieces of a limestone sculpture were also recovered near the hearths. The impression then is of an earlier floor that is less productive than the floor associated with the final abandonment of the structure. Valla's interpretations of this material are rather limited and uncritical as he interprets the artefactual patterning in straightforward terms as indicative of particular zones of domestic and/or ritual activity (principally centred around the two hearths) (1988b: 289). Indeed, aware that material might be interpreted as secondary and therefore not necessarily indicative of the location of primary domestic activities, he dismisses the possibility that it is dumped rather too easily,

> L'absence de tas d'éclats de silex, alors qu'on a des nucleus en cours d'exploitation de des percuteurs suppose dés evacuations. De même, la faune associée au sol paraît tout à fait sélectionée. Les os d'herbivores entourés des parties charnues font défaut. On peut croire qu'ils ont été rejetés. Ces exemples semblent indiquer qu'on ne laissait pas les déchets s'accumuler en masse. Cette conclusion est corroborée par l'absence de nappes denses de detritus au niveau des sols. (Valla 1991: 115)

Thus, it is assumed that much of the material directly relates to the final habitation phase; the bulk of the material is of the structure and not dumped from outside. With the exception of human skeletal remains, a cache of 'petits galets' and a broken figure, this material is considered to be a testament to a range of domestic activities principally associated with food preparation (and discard) and bone tool and lithic production. The condition of recovered finds is not referred to by Valla and, without access to primary records or to comparative data from other contexts, it is difficult to judge whether or not such an assemblage might be representative of habitation rather than abandonment. However, there are other interpretations that may be entertained concerning the meanings attached to such finds outside of their function or utility; these may be related to the association of artefacts (and indeed other materials) with individuals, with particular social groups, with ceremonies or with particular moments in time. In other words, Valla may indeed be correct in his contention that the artefactual evidence does not indicate 'les déchets s'accumuler en masse' but equally misguided in his narrow and separate focus on ritual as distinct from domestic activity. The distinction between ritual, subsistence or production is arguably an artificial and modern one.

An appreciation of the networks of meaning that can exist between artefacts, social practices, belief systems and the dead underlies Boyd's (1995) own reappraisal of the evidence of Structure 131 in the light of the cemetery (Cemetery B) that underlies the structure. For Boyd there is no accident in the placement of the structure over the dead; further, the occupation of the structure, the location of the hearths and the activities of the inhabitants were carried out with reference to the dead (ibid.: 22). In other words, the passage of every-day life, the carrying out of domestic activities has meaning and presence beyond every-day experience (see Parker Pearson 1992: 556). Notably, a further structure (51) is superimposed directly on top of 131 and there was no effort to clear the floors of finds. Such an occurrence is reminiscent of numerous other later sites both within and outside the Levant (see for example the Late Neolithic Ayious Epiktitos Vrysi, Cyprus (Peltenburg 1982; forthcoming). Boyd links such practices to the maintenance of lines of inheritance or land claims (1995: 23). Although his is a position that owes much to the work of Barrett (1988), within the context of the East Mediterranean and the Near East, Boyd's interpretive approach is relatively unusual in his insistence that archaeologists cannot investigate evidence for social practices by separately isolating particular bodies of evidence for analysis.

Type-site of the aceramic Neolithic Khirokitian Culture (late seventh – early sixth millennium BC), this comprises a substantial settlement of some duration. The site was first excavated in the 1930s-40s under the direction of Dikaios and more extensively since the 1970s under the direction of Le Brun. Khirokitia has been the subject of numerous other publications and studies (see, e.g. Dikaios 1953; Le Brun 1981, 1984, 1985, 1989, 1994; see also Papaconstantinou 1997).

Aceramic and ceramic Neolithic occupations have been identified at the site of Khirokitia; it is the former that is of particular interest here. The aceramic settlement is comprised of densely packed circular structures of varying sizes. These commonly contain various built installations (e.g. hearths, benches, bins and basins); many are partitioned or contain remains of internal pillars. A number of the exterior spaces (between structures) also contain built installations. It is commonplace at the site for structures to produce interments in pits below the floors of structures; stratigraphic evidence clearly reveals that the dead were buried during their habitation. An additional feature of the site is the existence of a series of substantial walls containing areas of the settlement. Whether they served a defensive purpose or not, it is clear that much of the settlement was circumscribed and access was restricted.

The chief focus of consideration here is Le Brun's report on the 1977-81 seasons of excavation at the site, wherein he endeavours to interpret the domestic organisation of space in the village and uses – in part – the spatial distribution of various categories of artefactual materials (1984: 191-197). The data that is used to support Le Brun's reconstructions is the product of meticulous excavation practices and detailed recording, as demonstrated by the quality of the plans and sections, and the retrieval of chipped stone debitage, plant macrofossils and fish remains. However, it will be argued below that given access to primary data (not available in the publication) on contexts and on artefacts (e.g. their point of recovery, their condition, evidence of reuse and so on) alternate interpretations of the material would have been possible, interpretations that more closely subscribe to the theories discussed in **section 3.3**.

For Le Brun there is a close link between those architectural elements that bound and partition various spaces, built features (e.g. hearths and basins) and the occurrence of portable artefacts within and between spaces. Thus, to quote him:

> Si la prise en compte des aménagements architecturaux qui-modèlement les sols a permis de classer les différents elements contruits selon le nombre des zones d'activité possibles ainsi marquees sur le sol, la prise en compte de l'inventaire recueilli dans chaque construction, c'est-à-dire les silex, la faune, les outils en os, la vaiselle en pierre et les molettes, mais aussi des installations à usage domestique, amène à reprendre ce problème sous un angle un peu différent. Le classement ètabli en function des aménagements architecturaux rendait compte en effet du cadre où d'éventuelles activités pouvaient se dérouler, l'étude de la distribution des matériels reflète, pour sa part, la realisation d'activitiés. (ibid.: 193)

The aim then is to reconstruct spatial functions. The direct association of artefactual deposition with the habitation of particular structures is implicit rather than made explicit, aside from a passing note regarding the densities of chipped stone and faunal remains,

> Les densities ont été calculèes en ne retenant que les pieces trouvées sur les sols et dans la couche de terre fine, parfois légèrement cendreuse, que les surmonte immédiatement et qui se distinguee du reste du remplissage par sa plus grande finesse. L'épaisseur de cette couche exceed rarement 0,10 m. Dans les cas où on a à faire à une succession de plusiers sols deposes les uns au-dessus des autres, les densités de materiel tendent à décroître, les sols ayant été généralement nettoyés. (ibid. 191)

It is unclear whether all the finds that are considered were recovered within 10cm above the floor of the structures. Indeed, when comparison is made between the horizontally mapped artefact densities and the depth of deposits between different floor levels seen in the section drawings there does appear to be some correlation whereby the most productive individual building phases are those with the greatest volume of material between separate occupation phases. Without heights for the finds it is though impossible to test this suggestion. Nevertheless, it is clear that there is an (unproven) assumption by Le Brun that the proximity of finds to the floor level (rarely more than 10cm) validates their interpretation as *in situ* (this is reminiscent of Verhoeven's (1999: 22; see **section 5.4.2**) own assumptions for contexts at Sabi Abyad). However, there are a host of archaeological and ethnoarchaeological studies concerning site abandonment that cast doubt on such assumptions (see, e.g. Cameron and Tomka 1993; see also other works cited in **section 2.3.2**). Indeed, using Le Brun's (1984) own spatial analysis it is possible to put a different interpretation on the broad patterning of find densities in exterior and internal spaces. Thus, there is a close correlation between the density of chipped stone and that of faunal remains for a number of structures and levels. In other words, contexts producing significant quantities of faunal remains and chipped stone are more likely also to yield small finds. Furthermore, it is also notable that the presence/absence of other small finds (e.g. bone tools, or stone vessels) also in many cases shows a correlation with densities for faunal remains and chipped stone. Such correlations are seen both in interior and exterior spaces (compare, e.g. densities for chipped stone, faunal remains and occurrences of small finds for Niveau IIIa (Le Brun 1984: Fig. 45)). However, in exterior spaces without built installations find density is interpreted in terms of rubbish dumping whereas in structures, similar find densities, and particularly the occurrence of individual small finds, is considered as *in situ* evidence of activity. Clearly, there is a bias in interpretation that is determined by the presence/absence of structures (as 'containers' for activities) and the built installations (e.g. hearths or bins). More fundamentally the interpretation of artefactual deposition is constrained by the importance assigned to architectural elements and the association of archaeological context with habitation stage 'systemic' use.

The neglect of site formation processes (particularly those associated with the abandonment of structures and sites) and the weak assumption that find spot indicates the primary locus of use are not the sole problems that can be identified with Le Brun's approach. Of concern is the interest in the function of space that wrongly separates different aspects of the past inhabitant's life and, arguably, gives precedence to the reconstruction of domestic activity, economy and technology. There is little consideration given to the meanings or values of the artefactual remains that Le Brun considers to be of a quotidian nature; they are simply the direct correlates of different domestic activities (of food preparation, cooking, storage or craft-working) carried out in the course of every-day life. The value or meaning of artefacts is therefore estimated in economic or utilitarian terms and is fixed regardless of their particular contextual or artefactual associations (see **section 3.3** for some criticisms of such assumptions). Notably, Le Brun also does not appear to consider other artefact attributes (e.g. condition).

With all the above in mind, the Khirokitia that is reconstructed by Le Brun (1984) clearly lacks an appreciation of the complexities of social life; it is a settlement that is marked by a certain uniformity in terms of the structures and the range of domestic activities that are performed. However, as argued in **section 3.2.3** and **3.3**, artefacts (be they portable objects or structures) can have multiple meanings and associations that may or may not be related to their physical uses. Artefacts (structures and portable objects) also have histories that can involve changes in their use and more significantly in their meaning (see, e.g. Gosden and Marshall 2000). Furthermore, artefacts (structures or objects) have agency; they play their part in the production and reproduction of the social and symbolic order.

Had an alternative approach been taken, then the reconstruction of Khirokitian society might be very different. Distinctions between artefactual depositions in structures and that in exterior spaces are assumed rather than tested precisely because artefacts are, when recovered in buildings, directly associated with that structure and – more particularly – with the habitation of that structure. Earlier analyses of three – albeit different – sites has indicated the close relationship between the recovered artefacts, their (structural) context of recovery and habitation stage use of particular spaces should not be assumed. Indeed, it is more fruitful to start from the premise that the artefacts and the structures were abandoned. Thus, artefactual assemblages should be compared across contexts of different kind in order to pattern similarities and differences that may in turn be used to test assumptions regarding the systemic relationship between the artefacts and their contexts or between the archaeological context and the systemic context. In turn alternate methods of patterning artefactual deposition across the site could be used to infer something of the principles of human categorisation processes embodied in material culture (and its treatment), the symbolic or social meanings attached to artefacts (and materials) and the worldview of past inhabitants (see preceding **sections 8.2** and **8.3**). At the same time such an approach could be used to counter the ahistorical inclination of archaeological constructs (contexts, typologies or stratigraphic boundaries) by encouraging discussion of variation and patterning of artefactual deposition in terms of the meanings invested in artefacts and social practices, meanings that are historically and culturally contingent (see **section 3.3**, particularly with regard to Chapman's (2000a) concepts of grounding, presencing and categorisation).

An example of a different variable of analysis than typological form is that of artefact fragmentation. The data on artefact condition is not recoverable from the published volume in question. However, had such information been available then analysis of patterns of fragmentation of various artefact categories across contexts at the Khirokitia might have provided different interpretations regarding the significance of particular artefact classes or materials and their treatment at deposition as it has done for the three case studies analysed in previous chapters (**Chapters 5-7**), including the later prehistoric Cypriot site of Mylouthkia. Following the case studies, such patterning might give the lie to spatial analyses that assume the fixed function or utilitarian meaning of artefacts and their ignore social or symbolic associations with particular individuals, groups or places. Fragmentation analyses might also serve to test the presumption that artefacts and deposits are *in situ* (primary) or secondary, rather than being the outcome of a variety of intentional actions or social practices associated, for example, with the abandonment or closure of a structure.

Of particular concern is the failure to appreciate the complexity and variety of human actions occurring during the occupation of various structures at the site; differences in terms of the life history of structures and of artefacts are ironed out in the process of applying uniform criteria for distinguishing domestic or other activities. In particular, such an approach fails to appreciate the role of artefacts and of the practices associated with the abandonment (and deposition) of artefacts and contexts in the production and reproduction of society (see **section 3.3**). The concentration of cultural materials in settlement contexts, for example, is of interest not least for the parallels with the later prehistoric case study sites of Sabi Abyad and Mylouthkia (although at the former site the presence of middening at Tell edge indicates removal of material away from structures and thoroughfares). This similarity suggests a comparable inclination to deposit objects and materials close to the places of their location of use and to the individuals who used them. There are many other aspects of occupation that such a concentration on broadly synchronous domestic activity does not allow consideration of; for example, there is potential significance of the superimposition of one structure upon another, or the repeated (re) occupation of structures that are separated by sometimes a metre of deposit. Is this to be explained simply by the constraints of such a dense built environment? Or is it indicative of notions of inheritance or of the longevity of ties (of memories and traditions) between generations or occupations? There is also the association of funerary remains with structures to consider at Khirokitia, although he does realise that potential existence of family ties spanning generations of rebuilding (and burial below the floors of dwellings), for Le Brun (1984: 196) the mortuary remains bear no direct relation to the artefactual materials above the floor that are simply a testament to various living activities. However, the presence of the dead below one's floor and indeed the reoccupation or replacement of earlier buildings should not necessarily be divorced from our interpretations of the lives of a structure's inhabitants or the treatment that a structure receives on its abandonment (see Boyd's (1995) reconsideration of evidence from Mallaha above). In other words, greater attention should be paid to the contextual and artefactual evidence with a view to potential links to be made between the various stages in the history of structures and wider social and symbolic meanings and practices involving the use and abandonment of artefacts and space.

Hajji Firuz Tepe, Iran

Situated in the Solduz Valley to the south of Lake Urmia, Hajji Firuz was largely occupied during the Late Neolithic period (sixth millennium BC). Excavations at the site were conducted in the late 1950s (soundings only) and late 1960s (main excavations) by the Hassanlu Project.

Voigt's (1983) report on the excavations at the site is of particular interest to the present study. While it follows the standard pattern of reporting by separately detailing the history of excavations, the methodologies employed, the stratigraphy, architecture, features, funerary remains and artefacts in turn, it also sets out to provide a functional interpretation of artefactual deposition within various structures (houses) (ibid.: 295-315). This interpretation is placed within the context of a larger synthetic interpretation of 'the economy of a sixth millennium village'. The latter reflects the emphasis of the original research design, as the project was inspired by processualist concern with 'the origin and spread of food production as a subsistence strategy' (ibid.: Acknowledgements). According to Voigt,

> An attempt has... been made to isolate "activity areas", or to determine the location of specific types of behavior within the village. The function of both interior (roofed) and exterior (unroofed) areas is inferred in the analysis presented here from two types of data: 1) the plans of domestic structures and the location of features such as hearths, ovens, pottery kilns and storage facilities; and 2) the spatial distribution of artefacts for which specific functions can be suggested on the basis of ethnographic analogy and the debris from the manufacture of artefacts. In theory it should be possible to reconstruct a variety of behavioral patterns by relating material remains to activities, and then analyzing the distribution of such activities within a settlement. In fact, the excavated material from Hajji Firuz Tepe does permit inferences about patterns of economic behavior and therefore a reconstruction of the economic organization of the village. (ibid.: 3)

The key factors in the generation of patterns are manufacturing activities, other primary uses of artefacts, storage practices, secondary uses of artefacts (e.g. as grave goods), accidental loss of artefacts, primary disposal of artefacts and secondary disposal practices (ibid.: 295). Voigt argues that,

> Depending on the behavioral elements and environmental factors responsible for distribution patterns, the loci in which artifacts and debris are found may correspond well to the loci in which they were use and/or produced, or may reflect *only* secondary uses or disposal practices. (ibid.: 295-6) (emphasis added)

Clearly, the main focus of concern is with primary deposits for these will reveal the function and use of settlement space. Little attention is paid to the 'secondary uses of artifacts' or their 'secondary disposal' (ibid.: 295). In this respect, the analysis of Hajji Firuz is precisely of that sort which has been criticised in a number of previous sections within the present study (see e.g. **sections 3.1 and 3.3**). The distinction between primary and secondary uses and depositions of objects reflects a conception of society (and by extension the archaeological remains) as something that can be compartmentalised into different aspects or systems for analysis. Thus, primary uses refer to everyday activities (e.g. subsistence or other essential needs), whereas 'secondary uses' includes the use of artefacts as grave goods. Such secondary uses of artefacts would naturally invite associations beyond simply the utilitarian but these are clearly deemed 'secondary' to the functional utilisation of artefacts in domestic space. Ironically, perhaps, such contexts are commonly given specific consideration precisely because they represent structured acts of deposition.

Voigt writes (ibid.: 296) that the character of the floors of structures reveals a 'casual attitude to house cleaning', quantities of artefacts and ashy deposits are swept out and removed from interior spaces to be dumped haphazardly in exterior areas while some small artefact and organic materials are left to be trampled into the floor. Though she admits that there is some difficulty between distinguishing the last habitation deposits and those that have might have accrued after abandonment, Voigt does not elaborate on this. Furthermore, there is no indication of the depth of fills producing the finds that she maps. In other words, her reconstruction is two-dimensional and, by extension, it lacks a temporal or historical dimension for find deposition or the use, modification or reuse of structures during their life-time. Essentially, then, Voigt's assumption that artefactual patterning in abandoned structures reflects the way in which past inhabitants lived is an unproven one and raises doubts concerning her reconstructions of the economic organization of the settlement. Critically the allocation of function to spaces in some cases relies principally on the occurrence of 'permanent or non-movable items' such as storage jars set into floors, hearths and ovens (found inside and outside and indicative of cooking and baking) (ibid.: 296).

It is notable that only very small areas of each of the exposed structural phases produced finds; furthermore, though the use of distributional maps shows some patterning in the location of certain groups of finds many of the symbols record single finds. Criticism of the size of the sample apart, the main flaws to Voigt's analysis lie in her preconceptions regarding the nature of village life, the organization of early farming communities and the meanings of artefacts. Hers is a functionalist vision of society and material culture, one that focuses on economy and technology rather than other aspects in the reconstruction of the settlement. It is, like many such studies, also heavily reliant on the use of ethnographic analogy to endorse functional classifications. Thus, without disputing her attribution of function to particular artefact classes we can dispute the fixed nature of such attributions and the inability to allow of different meanings or changes in the use and signification of artefacts. Other questionable assumptions also underlie Voigt's interpretations such as that regarding the sexual division of labour; for example, pottery is deemed a household task and therefore probably carried out by women whereas flint and obsidian knapping was a male activity.

By way of summary, certain common themes and assumptions run through these three studies. Each is focussed on the reconstruction of the use of settlement space and more specifically the domestic use of space with the aim of understanding the socio-economic organisation of early sedentary and/or village societies. To facilitate interpretation, past human (domestic) activity is considered as being analogous to ethnoarchaeological situations and/or our own. There is also a tendency to prioritise functionalist reconstructions of subsistence, economy and technology; this tendency is seen also in the way the data is parcelled up into categories that mirror the division and classification of material in archaeological reports.

A significant characteristic of these studies is the importance that interpretations of spatial function attach to architectural or immovable items over the occurrence of portable artefactual materials. This is common to spatial analyses of settlements and constitutes – in part – an awareness of the uncertainties surrounding the portable nature of artefacts (see, e.g. Daviau 1993 (below);

Papaconstantinou 1997). Nevertheless, each study contains largely unspoken assumptions concerning the connections between habitation use and artefactual deposition and pays scant attention to site formation processes. It should be noted that built installations may undergo transformations in use or form during the life-time of a structure; consequently, they may be of use in establishing a function for particular spaces during a particular phase or period of occupation but not necessarily for the whole period in which a structure or room was inhabited. More important however are the meanings that are assigned to artefacts and to the motivations considered to lie behind their deposition. Essentially, in all three studies, the meaning ascribed to artefacts is fixed and unchanging; they separately serve particular utilitarian, economic, decorative or religious functions. However, the artefact meaning of particular (or individual) artefacts can vary significant depending on context and on their history of production and use. Bearing the importance of both the historical dimension and of contextual association in mind, then, it is clear that the studies considered above would benefit from a contextual approach that takes into account the probability that the value-systems and worldview of ancient peoples was markedly different (but just as complex) from our own, and the equal likelihood that the artefactual depositions are not simply the outcome of *in situ* habitation stage activity.

Arguably, then, it is the modern conception of the rules governing human behaviour, of activity areas and of the archaeological 'record' that is at fault. Certainly, as has been argued, the concentration on reconstructing specific activities (e.g. domestic or subsistence) in space through structures and artefacts commonly ignores the temporal and historical dimensions of contexts and assemblages. By extension, such a concentration also leads away from the appreciation of the complexity and variety of the archaeology of early sedentary communities and of past social practices. As observed above, the evidence of ritual activity on prehistoric sites (particularly during the Pre Pottery Neolithic period) in the present region of interest suggests ideological, psychological and emotional dimensions to settlement contexts and artefactual depositions that are neglected in studies that focus chiefly on subsistence economy or the environment (see, e.g. Hajji Firuz and Khirokitia above). In this respect, this study's concern with interpreting artefactual deposition and its emphasis on the non-functional character of artefact meaning (treatment and deposition) and of cultural formation processes is particularly apposite. Finally, it is this study's contention that the Otherness of such ancient peoples and places is not simply to be established through the investigation of special 'ritual' contexts (e.g. non-domestic structures such as those at Gobelki Tepe with their monumental stelae (Verhoeven 2002)) or structured acts of deposition (e.g. skull caches) but also through the comparative study of what some might consider 'mundane' (domestic structures) or 'secondary' contexts (e.g. the pitfills at Mylouthkia).

Urbanism and state formation

Two major themes of archaeological debate concern the phenomenon of urbanism and the process of state formation. The first involving the growth of cities and the second the development of state level society. With respect to the latter, a distinction can be made between those theories that concern the origin and development of pristine states (e.g. the city-states of southern Mesopotamia) and those that concern secondary state formation as a result of contact with more advanced polities (see Price 1978).

Urbanism is frequently debated in combination with discussions of the development of 'advanced' (state) societies or, to put it another way, the emergence of civilisation. The impetus for the development of the first states remains open to debate; past theories have variously proposed single and multiple causes. Childe (1936, 1950) was the first scholar to coin the phrase 'urban revolution' and the first to set out a number of criteria used to define urbanised early state societies or civilisations. There have since been many studies focussing on urbanism in the Near East (e.g. Huot 1989, 1994; Huot et al. 1990; Lampl 1968; Nissen 1987). As with sedentism (above), the list of archaeological indices of urbanism is substantial and includes numerous characteristics that we might associate – in broad terms - with our own urban society (e.g. the evidence of large settlements, of hierarchical settlement systems, of administrative or other institutions, or the evidence of public works). In addition, material evidence of large-scale storage or of social inequality (that may be manifested in architecture, portable artefacts or burials) has also been considered significant in the assessment of the urban character of ancient societies.

For present purposes, however, it is unnecessary to engage in a full summary and criticism of the long list of criteria that have been used either in the identification of urban entities or in the wider debate surrounding the origins of cities. Of interest to this study (and the analysis of contexts from Jerablus Tahtani) is the importance assigned to the Uruk civilisation as the first urbanised society of the Old World (see Childe 1952: 123-147). In particular, the impact of this society on neighbouring less advanced areas such as that of the Upper Euphrates has been keenly debated (see, e.g. Algaze 1989, 1993a, 1993b concerning the period of the Uruk expansion). A commonly cited motivation behind the southern infiltration into northern Mesopotamia (and further afield) is long distance trade; indeed, there is a considerable literature concerning the importance of trade to early state development (e.g. see Adams 1974; Haas 1982; Kipp and Schortman 1989). Whereas the Uruk expansion has been cited as an example of secondary state formation (see Fried 1967: 240-242; Price 1978), some scholars have argued for the existence of greater complexity in the peripheral regions prior to Uruk contact. In so doing, they have suggested that the socio-political and economic interaction between southern Mesopotamia and indigenous societies took place on a more even footing (e.g. Lupton 1996; Oates, J. 1986: 252; Rothman 1993; Stein 1990, 1998; Stein and Misir 1994; Stein et al. 1996; Wattenmaker 1990). For example, Stein has argued that 'the Uruk presence at Hacinebi did not necessarily transform the local economy in the ways predicted by world systems models of interregional interaction' (1997: 145; see also Rothman et al. 1998). Furthermore, it can be argued that broad cultural links were already established during the earlier 'Ubaid period (Frangipane 1993).

The period of Uruk expansion and the succeeding 3rd millennium developments of early state society in the area have already been discussed with reference to contemporary occupations at Jerablus (see **section 6.8**). Consequently, it is unnecessary to engage in a lengthy recapitulation; however, a summary of the main observations is useful, as they have relevance for the following discussion. Thus, certain parallels were noted between artefact deposition at Jerablus and that seen at broadly contemporary sites of the Late Chalcolithic and Late Uruk period (e.g. Hacinebi), where the bulk of small finds come from Uruk trash filled pits and not structures, where structures are cleaned out and deliberately filled and where diagnostic Uruk ceramics are commonly left complete and in considerable numbers. It was noted that the deposition of whole vessels in the Uruk levels at Jerablus marked the only significant difference in artefactual patterning that could be discerned between the Late Chalcolithic and Early Bronze Age levels at the site. The latter occupations coincide with occupations on large urban settlements, including Carchemish and Ebla to the south of Aleppo. Archaeological and textual evidence from the period implies a high degree of socio-political and economic integration in the region. Although unequivocal answers could not be given as to the site's independence from, or role as a satellite of Carchemish, the potential import of such factors on the character of artefactual deposition within the built environment was considered. Thus, it was suggested that Jerablus displayed many characteristics indicative of a community level control and maintenance of the built environment. A fort wall circumscribed the site and structures were kept clean and abandoned with little in the way of artefactual remains. Furthermore, they were frequently infilled to presumably provide level ground for new building. This new building often followed the plan of earlier structures but – on occasion – there was a hiatus in occupation as former 'residential' areas (perhaps even the whole of the top of the mound) were given over to cemetery use. The continuous occupation at the site and the practice of infilling and rebuilding also had the net effect of raising the small mound higher and higher above the alluvium on which it was situated. The social and practical advantages of this in relation to the periodic flooding of the river or the visibility it afforded (or indeed intervisibility with other sites and with riverine communications) should not be underestimated. Clearly, then although the site of Jerablus presents some challenges to those spatial analytical approaches that seek to reconstruct the function of space during the habitation stage through patterns in artefactual deposition, the operation of maintenance or abandonment activities, when considered in relation to the other evidence of occupation at the site, can stimulate wider interpretations of social practices.

In order to further illustrate the limitations of existing approaches, two sites have been selected for consideration, namely: Tepe Gawra (Iraq) and Myrtos (Crete). In addition to these, Daviau's investigation of house and households in Middle and Late Bronze Age Palestine is also considered. These studies have been chosen by virtue of the broad chronological, geographical and cultural spread; their selection has also been made because of the quality of their publication. With respect to the latter however it should be reiterated that reanalysis and/or reinterpretation using the partial records contained in the various publications is not feasible. As noted previously, these studies are considered only briefly in order to demonstrate the limitations of existing approaches to the interpretation of artefactual deposition and the use of space and to suggest hypothetical interpretations or new directions that may be taken given the requisite level of recording of contexts and artefacts.

Tepe Gawra, Iran

Located in the foothills of north-eastern Iraq, Tepe Gawra was occupied almost continuously from the Halaf Period (sixth millennium B.C.) through to the late fourth millennium B.C. Excavations in the 1920s and 30s under the direction of Spieser and (later) Bache, exposed 7 superimposed fourth millennium B.C. towns and large numbers of fourth millennium burials at the site. Given the size and depth of settlement exposure, Gawra is of great importance to our understanding of the chronology of the Terminal 'Ubaid to Uruk periods in Northern Mesopotamia and the character of the Uruk expansion into Northern and Eastern Mesopotamia.

Recently, Rothman (2002) has completed a substantial reanalysis of the Uruk levels that utilises unpublished material to facilitate a better understanding of its chronology, of site function and of its development from the pre-contact to contact periods. A particular feature of Rothman's reconstructions of the socio-political and economic activities of the ancient inhabitants is his mapping of artefact distributions onto the architectural and open spaces of each of the living towns and the graves of the dead. Rothman sets out three basic questions that define his analysis thus:

> 1. what are the economic, religious, or administrative activities performed by the residents on the mound during each identifiable segment of time (each level and sub-level phase); 2. How are these activities distributed throughout the site; and 3. How do the physical placements of these activities in or near buildings of distinctive architectural plan or size reflect a discoverable relationship between architectural forms and the functions they house? (2002: 4)

By addressing these questions Rothman's aim is to define the site's place in its 'economic and social universe, to address issues relating to the evolution of complex societies, and to understand better the early social (pre-) history of Greater Mesopotamia' (ibid.). For him, the functional segregation of activities is clearly indicative of social complexity because, as specialisms evolve, the interaction and interdependency between groups increases and, concomitantly, social stratification develops. Rothman's is an evolutionary history of the site that involves a

> ...retelling of what was happening on the site functionally and explaining how it was organized socially from level to level through time. Examples of such functions include agricultural and pastoral production, hunting, cloth, tool, pottery, and ceramic making, import and export exchange, running local exchange systems (market places if not marketing), food preparation, family living, resource extraction, building construction, military exercises, symbolic representations, religious and social ritual. (ibid. 61)

The functional classification of artefacts is standard and, though Rothman defines a greater range of activities, his classes are not greatly different from the broad functional categories utilised in the present study. Thus, there are categories of ritual or symbolic, craft tools (including agricultural production, processing of animal fibres or weaving, wood-working and pottery-making), domestic items (including serving vessels, food preparation, storage and adornment), games, administrative (e.g. sealings, seals and tokens) and military (e.g. slingmissiles and metal weapons) (ibid.: 66-7; Table 4.1). Notably, the functions of artefacts are largely estimated in utilitarian terms and they are kept as constant throughout the analysis. There is no consideration of the potential values or meanings attached to artefacts. Furthermore, there is selectivity inherent in the significance that is attached to certain artefact categories and Rothman makes certain assumptions about artefact categories that are standard; thus, for example, seals and sealings are associated with record keeping, with storage and with ownership. They are frequently discarded near where they were opened or where the items were stored (ibid. 82). In earlier levels (XII) these finds are found widely distributed across the 'houses' in later levels they are more centralised.

Rothman divides spatial function into five categories, namely: temples or religious shrines, secular public buildings, private residences, craft production areas and open spaces (ibid.: 73). His divisions are in keeping with those of Jawad (1965) for the 'Ubaid in Mesopotamia (see also Kubba 1987). The definition of spatial function is reliant on both architectural and artefactual evidence but in the case of residential structures Rothman also references the ethnographic studies by Watson (1979), Kramer (1982) and Horne (1994). He also estimates population per household using Watson and Kramer's calculations.

Admittedly, the character of the data on which his analysis is founded restricts the scope of Rothman's study. Methods of retrieval, recording and collection were poor by modern standards; although for some seasons three-dimensional reconstruction of find spot for certain artefacts was possible (ibid.: 24). Thus, for example, paleoenvironmental evidence, small artefacts and debitage were not recovered and 'site supervisors rarely recorded secondary and tertiary trash and fill deposits, if they noticed them at all' (ibid.). Rothman also raises a number of additional factors that constrain his analysis and interpretations:

> First, the artefacts recovered archaeologically represent only a small fraction of functional items originally used. Some of the original repertoire of tools and most raw materials were made of perishable materials and have disintegrated, or have been used off-site and lost. Some were refashioned for other uses. Others were discarded in a way that they were not recovered intact, or were intentionally taken from the site in antiquity. Second, the use of some artefacts cannot be fully understood today. Third, many artifacts do not remain in the provenience of their initial use at the site. At Tepe Gawra, whether in initial position or not, precise three-dimensional provenience is not available for most artifacts from Level X to VIII. ...Therefore it is not possible to know for certain whether artifacts in the same excavation square are actually associated through use or whether one was left in a primary context and the others found their way to that provenience as secondary or tertiary construction fill. Fourth, not every stratum is completely exposed. (ibid. 61)

In other words, Rothman identifies factors that lead to differential preservation and/or that distort the record but only in passing. Loss of organic or fragile materials, removal of artefacts from site, failure to understand ancient functions, secondary deposition or incomplete excavation, however are not the sole factors that should be considered in the creation of archaeological contexts and assemblages. Although the contextual information is not available, some further consideration of the possible cultural formation processes that operated at the site might have prompted a more considered approach to the interpretation for artefactual deposition. More importantly, Rothman's study lacks a consideration of social implications and social agency involved in artefactual deposition; indeed, the rich variety and complexity of social practices and meanings associated with artefacts and settlement space is reduced in his constructions of a grand evolutionary vision of the development of socio-economic and political complexity.

Rothman uses a threefold categorisation of artefactual deposits, namely: primary, secondary and tertiary. Primary contexts constitute those where the recovered artifacts have records (or 'chits') with comments like 'on the floor' or 'on the pavement' of 'x' location. Secondary contexts are less reliable but Rothman does utilise certain artefacts 'with a specific find spot that in all probability places an artefact in the building where it was used or in a context where its association with other artifacts is likely' (ibid.: 71). Tertiary 'trash' deposits are not used as they 'can tell us nothing of either the function of the space or the association of artifacts' (ibid.). The division of contexts into three classes in this manner is naturally arbitrary and serves heuristic purposes. However, the assumptions that underlie such divisions are questionable. There is little mention of abandonment activities or their impact. Instead, where explanations are offered for artefacts being potentially above the floor and out of their primary context, Rothman is inclined to argue that this is the product of two-storied construction or, less inclined to suggest that the levelling out processes churned up and mixed depositions. Such an argument is seen, for example, in his discussion of the White Room (ibid.: 75-77), a structure that has many of the architectural characteristics of temples or shrines but which also produced artefacts associated with domestic activity. Parallels with other structures at the site, with other sites (e.g. Tell Madhur (Roaf 1984: Figure 7) and Tell Abada (Jasim 1985), vernacular Anatolian architecture (Oliver 1987: 135f), with Yoruba cultivators in West Africa (Forde 1963: 151f) and ancient Mesoamerica (Blanton et al. 1993: 174f) indicate that these are extensive family dwellings (Rothman 2002: 78).

Given the character of the old excavations at Tepe Gawra and the nature of the published data available, it is not possible or wise to attempt a reinterpretation of Rothman's analyses. Nevertheless, Rothman uses the classic divisions of refuse to measure the suitability of contexts and artefactual material for spatial reconstructions. In this respect, the Tepe Gawra study is illustrative of the way in which archaeological categories and constructs (informed though they may be by the early work of Schiffer, judging by the terms such primary or secondary contexts) are used to reduce the complexity of the settlement record in order to support a two-dimensional reconstruction of artefactual distributions, and by extension a synchronic spatial analysis of the differential use and functional meanings attached to particular spaces.

Fournou Korifi Myrtos, Crete

As an example of an Early Minoan (EM II) settlement, Myrtos has been widely discussed in terms of the insights it provides into political and economic organisation of prepalatial Crete. Excavated in 1970, the settlement consists of a cellular building complex of conjoining rooms, areas and passages (Warren 1987: 49). Significantly the settlement was destroyed by fire leaving a remarkably rich assemblage of finds and inviting the conclusion that room contents were preserved *in situ*. The date and preservation of the settlement in combination with early interpretation of its character has invested

Myrtos with a particular importance in discussions of the origins of Minoan palatial society. Thus, in his site report, Warren clearly felt that in Myrtos he had identified the possible forerunner of the later Minoan settlements or possibly the first Minoan palaces,

> It is much easier to see the rooms with known functions (for example kitchen and pithos magazine in the south-east, main rooms in the south-west, shrine in the south-west corner) complementing each other within a single, large complex penetrated by the three passages, rather than separate and self-sufficient living units making up the whole. If this description is accepted certain important architectural and possibly social consequences arise. (1972: 11)

> While on the one hand we can see here the Later Minoan settlements in less evolved form, I think there are also several features which are reminiscent of, or rather find their full development in the Minoan palaces. (ibid.: 260)

> The similarities must not be exaggerated, but the single, large architectural complex with several distinct areas organized for specific purposes, does suggest that the origins of the palaces are to be sought here in settlements such as Myrtos and Vasilike, architecturally in part and economically in full. (ibid.: 261)

Though the site lacks the monumental aspect and columns of the early palaces, Warren suggests that the close-knit nature of the settlement together with the possible existence of a centrally located open 'court' and internal bench fittings are reminiscent of Early Minoan III-Middle Minoan I buildings south of the palace at Mallia (1987: 49, 1972: 260). A further feature of Warren's interpretation is the identification of 'storage magazines' (1972: 48-50) that he considers invite comparison with the vast storage facilities of the later palaces. These latter are of particular importance to debates concerning the redistributive function of Minoan Palaces and their origins. Interestingly, Warren (1987: 52) initially speculated that the character of the settlement at Myrtos suggested communal living in the form of kin groups, an extended family or a clan. Those areas that were given over to different functions (e.g. textile production, food preparation/cooking, storage and oil- and wine-making) reflected the separate activities of 'individual units or small groups within the close knit community as a whole' (Warren 1987: 52). Using the same evidence of functional zoning and speculating that the site was built as an integrated whole, Branigan offered an alternative interpretation by suggesting that the site was the mansion of a 'big man' (1970: 47-8, 1972: 752).

As mentioned above, a notable feature of the final phase (Period II) of the settlement is its destruction by fire. Vasilike, another well-known site of the period, met a similar end and together they have been taken as possible evidence of conflict and – by extension – of competing communities or elites. The heavily burnt deposits yielded a significant quantity of artefacts, including many completion and reconstructible pottery vessels. From the site report alone it is difficult to contest Warren's clear assumption that the destruction has preserved *in situ* remains. Reinvestigation by Whitelaw (1983) however has fuelled rather different interpretations of the character and organisation of the settlement arguing that the architectural and artefactual evidence points to five or six families living in functionally similar structures.

It can be seen from the distribution of these various inferred activities that most of the rooms in the settlement are multifunctional; but the dispersed distribution of the different activity areas throughout the community is clear. (ibid. 331)

... five clusters may be identified in the south-west, south-central, south-east, north-central, and north-west area of the site. It may be tentatively suggested that the extremely eroded area in the east-central part of the site may have originally contained a similar cluster. The two other groups of rooms, in the centre and on the summit of the site, represent clusters which had gone out of use before the destruction of the settlement. (ibid. 332)

Whitelaw concludes that these are households and that there is no evidence of any status divisions. However, a 'supra-household integration and activity' may be witnessed in the construction of the settlement wall and one or two public rooms. Otherwise,

Economic independence in terms of agricultural storage, processing, and consumption is implied by the presence of storage facilities, quern-stones, and cooking areas within each unit. This is also argued by the evidence for craft production... (ibid.: 333)

Essentially, then Whitelaw's is an important reanalysis of Myrtos and a source of alternative interpretations on the nature of prepalatial society. Indeed, the absence of evidence of hierarchy at the sites poses problems for the timing and character of developments leading to the early palaces. However, Whitelaw's study nevertheless adheres to the same original assumptions regarding the meaning of artefactual deposition in the destruction levels of Myrtos. In other words, artefacts are narrowly limited to specific functions (e.g. food preparation, cooking, storage or textile production) and their patterning on the site is *in situ*, presumably as a result of a catastrophic destruction that prevented the inhabitants from leaving with their possessions. Without access to primary records this interpretation is difficult to refute here; yet, as has been recognised in the case of Sabi Abyad, regardless of the evidence of catastrophic firing and of rich assemblages, analyses should endeavour to demonstrate their assumptions regarding *in situ* deposition and abandonment practices.

Daviau's (1993) study of houses and their furnishings in Middle/Late Bronze Age Palestine

Using data gleaned from the publications of a considerable number of Bronze Age sites in the southern Levant, Daviau endeavours to characterise Middle – Late Bronze Age houses. In her own words it is a

...painstaking task to assemble functional groupings according to locus in order to distinguish the partially preserved material correlates of specific behavior patterns. (1993: 26)

The focus of her study is on the identification of domestic activity areas; the recognition of the latter is heavily reliant on analogies with ethnographic and ethnoarchaeological data. As can be seen from other cited investigations into the organisation of settlements (e.g. Papaconstantinou 1997; Verhoeven 1999; Voigt 1983), the adoption of ethnographic parallels to lend weight to the attribution of function to archaeological situations is not uncommon. Indeed, Daviau's utilisation of ethnoarchaeological studies by Watson (1979) and Kramer (1982) to compile 'activity sets' is in keeping with the processualist nature of her own investigation. According to Daviau (1993: 52) small artefacts can provide 'unambiguous functional identifications' their patterning in space can in turn stimulate interpretations:

> It is clear, however, from the current ethnographic studies of village life that the location of an activity is not completely random. Each activity requires a series of conditions and requires the use of associated objects that form a pattern. It is the recognition of these of these patterns or portions thereof, in the archaeological record, that makes possible the analysis of the spatial distribution of the artefacts and by-products of the activities themselves. Each pattern, whose signature is only partially erased by its depositional history, enables the archaeologist to distinguish and identify activity areas within domestic space. (ibid.: 31)

Clearly, site formation processes though little discussed by Daviau are essentially seen in a negative light as the cause of distortions in the patterning of primary artefactual deposition. The best contexts are those that have met a catastrophic end,

> Houses destroyed suddenly or violently may preserve more finds *in situ* than deliberately abandoned structures. (ibid.: 63)

Turning to her conclusions for both the Middle and Late Bronze Age sections, the importance of artefactual patterning can be seen to be subordinate to the architectural evidence of the function of spaces. Thus, for example, food preparation and storage activity areas are 'two of the most common domestic activities' that Daviau is able to 'localise' as

> The areas apparently associated with food preparation and consumption usually exhibited certain architectural feature, such as ovens/hearths, benches/shelves, bins and pits, that were otherwise associated, in my ethnographic survey, with activities typical of a kitchen and/or living room area. (ibid.: 448)

> The location of the storerooms in the domestic space seemed to be fairly consistent. Storerooms typically were small, roofed rooms that opened on to the larger hall or courtyard. (ibid.: 452)

The artefactual evidence is less convincing. For example, Daviau concludes her Middle Bronze Age analysis by noting that artefacts associated with food preparation, storage and cooking are commonly found along with personal possessions. Similarly, artefacts associated with textile production are not identified to any particular space and

> ...many small items related to recreation, adornment, cosmetic use and religious belief have been found randomly scattered throughout the ancient houses. (ibid.: 218)

In other words, although a variety of artefact classes are represented (testifying to a range of domestic or other functions), overall artefactual deposition is random and therefore unable to support reconstructions of the use of particular spaces or of activity areas (see also Papaconstantinou's (1997) similar conclusions regarding attempts to reconstruct Neolithic domestic space in Near East). And yet, the assumption that the material recovered from each structure is of that structure and a reflection of everyday life in that structure remains. This may be true in certain circumstances, but it is an untested assumption. Furthermore, the failure to successfully interpret artefactual patterning in terms of activity loci might be disappointing, but as has been argued in respect of the three case studies (see **Chapters 5-7**) artefacts and artefactual deposition can be invested with other non-functional meanings. In effect, then, the limitations are imposed by the questions asked and the assumptions that are made.

Some of the key areas that are worthy of particular criticism in the above studies of urban societies parallel those in the preceding section concerning early village communities and the origin of sedentism. Thus, in each of the studies there is a failure to appreciate the impact of site formation processes; where reference is made to site formation processes it is clear that they are conceived of as being a negative influence on the character of the archaeological record and - by extension - on functional spatial analysis. Alternatively, where Schifferian categories (in particular) are utilised (e.g. Tepe Gawra) they serve to provide justification for the analytical suitability of certain contexts (as *in situ*) over others.

There are some differences to be discerned in approaches that are linked perhaps to the wider understandings of complex societies (e.g. early states) and the origins of cities (urbanism). For example, with respect to Tepe Gawra there is an emphasis on illustrating the changes in the 'functional size' of the settlement during the fourth millennium BC that are discussed in the context of the evolution of social-complexity and the development of urban societies. The notion of 'functional size' is redolent of the modern concept of settlement hierarchies (and functions) employed in archaeology and - more widely – in human geography.

It is also arguably the case that foreknowledge of later socio-economic and political developments also impacts on interpretations and approaches. Thus knowledge of the achievements (and material culture) of the Late Uruk period informs the character of Rothman's study. In particular, there is clearly a precedence given to certain artefactual classes and certain evidence of functional differentiation (e.g. administrative artefacts). Likewise with respect to Myrtos there is a clear bias in interpretations that are built on the pre-existing knowledge of what came after, namely palaces. Lastly, Daviau openly uses iconographic evidence from Egyptian sources along with ethnographic evidence to reconstruct domestic activities. The importance of textual sources should not be underestimated in terms of their impact on, and importance to archaeological reconstructions of ancient societies (see **section 1.2**). Although, they are perhaps of lesser importance to studies that concentrate on domestic activity, as 'archives' are commonly associated with non-domestic structures. Nevertheless, evidence of accounting or record keeping is often given precedence in the literature and, indeed, discussions of material from urban sites of the late 4th millennium on often see particular weight given to the textual evidence. Interestingly, many of the texts recovered come from questionable contexts, from dumps or from room fill but seldom are the ramifications of such associations considered.

Ahead of the concluding section of this chapter, a final short word should be said regarding issues of ethnicity and acculturation.

Ethnicity and acculturation

For present purposes Jones' definition of ethnicity is adopted here whereby

> Ethnic groups are culturally ascribed identity groups, which are based on the expression of a real or assumed shared culture and common descent (usually through the objectification of cultural, linguistic, religious, historic and/or physical characteristics). (Jones 1996: 84)

For Jones (1996: 90), ethnic identity is 'grounded in the shared subliminal dispositions of the *habitus* which shape and are shaped by, objective commonalties of practice' (see also Bentley 1987: 173). The language she uses and the theoretical position from which it stems should be familiar, as it has already been referred to in connection with approaches to the interpretation of built-environments (see, e.g. **sections 3.2.2** and **5.4.1**). In essence, Jones applies Bourdieu's (1977) concept of *habitus* to develop a practice theory of ethnicity wherein it is possible to recognise certain cultural practices and historical experiences as symbolic representations of ethnicity (Jones 1996: 91; see also Eriksen 1992: 45).

Although, for present purposes there is no merit in engaging in a lengthy discussion on ethnicity it should be appreciated that there are problems with the interpretation of archaeological cultures in terms of ethnic groups (see for example Tallgren 1937; Binford 1965; Hodder 1982a; Trigger 1978; Ucko 1969). Thus, for example, some scholars have questioned the arbitrary and constructed nature of archaeological classification in general (e.g. Binford 1965; Renfrew 1977; Shennan 1978). Others have suggested that ethnic groups are dynamic and therefore do not exist as the fixed and bounded entities that many perceive them to be (Jones 1996: 109-110).

The second term, acculturation, refers to the process of the intermingling of cultures. Kroeber (1948) stated that acculturation comprises those changes in a culture brought about by another culture, resulting in an increased similarity between the two cultures. Although, such change may be reciprocal, very often the process is asymmetrical and the result is the (usually partial) absorption of one culture into the other. Thus, acculturation has been defined as the process of systematic cultural change of a particular society (including language, habits and values) carried out by an alien, dominant society (Winthrop 1991:82-83).

Archaeological interest in assaying ethnicity and cultural interaction from the archaeological record is widespread and well documented, with scholars researching the relationship between certain material culture groups and specific social practices and activities of particular peoples or political organisations (e.g. Cooper 2001: 79; Emberling 1997; Jones 1996; Meskell 2001; Redmount 1995). Indeed, the identification of ethnic affiliation with material culture traits is to be found in debates concerning urbanism and secondary state formation considered above (see, e.g. discussion of material from Jerablus, see also section on Tepe Gawra). For this reason additional site examples are not considered here.

The appreciation of site formation processes and their impact on artefactual assemblages serves to introduce a note of caution into archaeological definitions of material culture 'packages' (i.e. series of associated artefactual types of various forms, functions and styles). It is not simply the case that site formation processes operate to blur or distort the systemic context of use in a functionalist sense. As has already been noted, cultural formation processes involve a host of actions that do not necessarily conform to modern estimations of a utilitarian or economic nature. Thus, cultural site formation processes and variations in artefactual deposition at the intrasite level may reflect specific local attitudes to artefacts and strategies behind their treatment at deposition. It therefore follows that the study of artefactual deposition has the potential to illuminate social practices and values that might themselves be the signature of different ethnic entities or other forms of social grouping (e.g. by gender or class). Furthermore, changes in local strategies to artefactual deposition might be symptomatic of wider social (or ethnic) changes.

8.5 REVIEW

Following the preceding analyses, this chapter began with the observation that each site offers a specific and individual case for investigation and interpretation. The singularity of each site is not simply an archaeological reality in terms of preservation, environment, geography, chronology or the vagaries of archaeological practice. Their individuality also lies in their separate histories, in the actions of past inhabitants and the specificity of local social practices that have impacted on both the form of the built environment and on the treatment and deposition of artefacts.

Discussion then moved on to reinforce the earlier contention (see **sections 2.6** and **3.2**) that reconstructions of settlement and of artefact deposition are weakened by a host of problems of a methodological and theoretical nature. Many studies ignore site formation processes altogether, touch on them too lightly or - more fundamentally - fail to appreciate the theoretical foundations on which archaeologists construct their theories about the use and abandonment of space. More importantly the functionalist assumptions that underpin many spatial analyses and site formation studies introduce (modern) bias to interpretations of past societies.

Clearly, there are difficulties in interpreting and distinguishing between habitation, abandonment and post-abandonment phases of artefact deposition. Nevertheless, from the three site analyses, it is equally clear that any settlement study that is concerned with investigating the organisation of space and nature of occupation (and re-occupations) will benefit from conducting comparative analyses of as many different structural and other contextual elements as are recovered (see also Needham and Spence 1997: 86) (see **sections 8.2** and **8.3** above). Investigating artefactual deposition across a site in this way can assist both the interpretation of settlement space and artefact meaning. It can also facilitate a greater understanding of the complexities of social practices, of shifting attitudes to space and artefacts, of the historical dimension of settlement, and of the variety human action.

Finally, the last section served to outline a number of wider issues potentially affected by an investigation of artefactual deposition that has as its goal the elucidation of site maintenance strategies, abandonment activities and related social practices. In particular, by targeting a number of published settlement analyses for criticism, an emphasis has been placed on the positive contribution that such research avenues might have on archaeological interpretations of social practice within built environments and on social change. Naturally, having only access to published site reports (synthetic works), reanalysis and reinterpretation of the sites is not possible. Nevertheless, using the site examples it has been argued that existing approaches clearly fail to do justice to the variety, complexity, uniqueness and Otherness of the past; instead, they uncritically found their interpretations on analyses that employ the terminology, reasoning and values of the modern (Western) world. Of all the sites considered greatest attention was paid to Khirokitia, as an example of an extensively and meticulously excavated site of the early prehistoric period on Cyprus. Despite the wealth of evidence for the symbolic dimension of human activity in the Neolithic, Le Brun's reconstruction focuses on the interpretation of the domestic economy of the village. Although the economy or technology of early prehistoric peoples is of interest (particularly in the context of long established evolutionary frameworks), it was argued that a comparative contextual analysis of artefactual deposition using variables of condition or curation, for example, would have afforded new insights into the character of ancient social practices and of site formation processes. In turn, drawing on the theoretical issues raised in **section 3.3**, the elucidation of social practices associated with artefactual deposition can facilitate the interpretation of ancient principles of categorisation, of different value-systems and alternate worldviews. It follows also that evidence for changes in the broad patterning of artefactual deposition in general or changes in the patterning and treatment of particular artefact categories, materials or classes could linked to more widespread transformations in social organisation or ideology.

CONCLUSIONS

The interpretation of artefactual deposition is integral to archaeological reconstructions and interpretations. While the artefacts themselves have provided the typological basis for relative chronologies and for the definition of material culture packages, their spatial distributions have also fuelled the reconstruction of settlement space and - by extension - the socio-economic organisation of past societies. As this thesis has demonstrated, however, there is a common failure to appreciate the true variety and complexity of artefactual deposition on settlement sites in the East Mediterranean and Near Eastern archaeology. Most notable is the common neglect of site formation processes and the failure to appreciate the theoretical assumptions underlying approaches.

Within the region of interest (e.g. the East Mediterranean and the Near East) research into site formation processes in general has proved less extensive than in the North American continent (see **section 1.2** and **Chapter 2**). Greatest attention has been paid to natural formation processes in geomorphological and geoarchaeological studies and, although the microstratigraphical analysis of sediments is becoming more common, it remains the case that site formation processes (cultural and natural) are given little consideration in many reconstructions of settlement organisation. This is regrettable for, as argued in **sections 8.3** and **8.4**, the impact of cultural formation processes on settlement data is significant at both the intrasite and intersite level as it affects wider archaeological understandings.

Ideally, the reconstruction of artefactual deposition on settlement sites requires equal attention to be paid to the elucidation of both cultural and natural transformations. However, this study has concentrated on the action of cultural formation processes with the specific intention of illustrating their importance to our wider interpretations of past human societies and human action. This has required (see, e.g. **section 2.6**) a reconsideration of the processualist or behavioural conception of cultural transformations. Contrary to processualist reasoning, cultural processes are not simply mechanical processes motivated by economic or practical considerations; instead they are a facet of wider social practice. Consequently, they should not be seen simply as a nuisance, obstructing our efforts to understand the functional division and use of settlement space or activity areas. On the contrary, they are vital to archaeological interpretations of inhabited places; potentially providing a glimpse of past values and attitudes that are bound up in material culture and that may - in turn - be linked to wider social-political or economic circumstances and developments (e.g. sedentism or urbanism; see **section 8.4**).

The substance and tenor of this argument brings us to further conclusions that relate to the persistence of functionalist frameworks in site formation studies and settlement archaeology. Functionalism is intrinsic to many extant studies of site formation with their simple estimations of artefact deposition in terms of Least Effort principles, resource availability, portability, usefulness, obstructiveness and so on (see, e.g. **sections 2.6**, **3.5** and **8.3**). Such concepts constitute *a priori* assumptions about the past and are based on thoroughly modern (Western) constructs and value systems. Similarly, past studies of the use and abandonment of space (regardless of whether or not they include the consideration of site formation processes) have also shown an inclination to utilise the terminology and (ethnocentric) assumptions of earlier theoretical movements (e.g. functionalism, cultural ecology and processualism). This inclination is evident in the naming of contexts, the utilisation of artefactual distributions, the conceptualisation of activity areas and, consequently, in the analysis of spatial function. Indeed, there can be seen a persistence of functionalist frameworks and methodologies in more recent works that espouse structuralist or post-processualist interpretative approaches (e.g. Verhoeven 1999). Though there may be some validity to certain of the practical and economic arguments that inspire many existing reconstructions of past human activity (including site maintenance and abandonment behaviour), it is a mistake to assume that all human action (past or present) is dictated by such limited concerns. As noted in **section 2.6**, concentration on such variables alone clearly overlooks the import of symbolic and cognitive factors, and also denies the unique character of individual settlements and their inhabitants (the human agents). It follows that an awareness of the limitations imposed by functionalist approaches to the interpretation of artefactual deposition and the use of settlement space should be of critical importance to archaeological analyses and interpretations of the past. A reliance on functionalist notions of utility and economic worth merely limits (and undermines) reconstructions of settlement space and of social practices. With their assumption of universal ways of doing things or of the Western values being applicable to past societies, such studies reduce the complexity and variety of individual site histories and contexts. Functionalist estimations of value encourage the failure to appreciate the importance of those social practices that are associated with the maintenance of the built environment, its abandonment and the meanings invested in artefacts and their treatment (particularly at deposition). They also encourage the archaeological preference for certain contexts (e.g. structures) and activities (e.g. subsistence) over others.

A focus on cultural transformations as part of wider social practice in combination with an appreciation of the meaning(s) and agency of artefacts and materials themselves has informed this study. At another level the intention has been to consider how the treatment of artefacts might be better used in the construction of historical understanding of sites and their inhabitants. In the following section findings from the three case study sites will be used in order to draw some wider conclusions regarding the interpretation of artefactual deposition.

9.2 THE CASE STUDIES

From the analyses of the three case study sites it is clear that each is unique and presents culturally and contextually specific problems for archaeological understandings, however, in certain respects each is also representative of particular archaeological situations that include sites of analogous period and/or character. With this in mind, citing conclusions from the three case studies this section will reach some general conclusions concerning the interpretation of artefactual deposition (see **section**

8.2).

A key general conclusion of this thesis is that the analysis of all three sites reveals that the identification of secure *in situ* artefactual evidence is problematic. More significantly, as observed in **section 8.2**, the artefactual distributions cannot be readily used to support synchronic spatial analyses. This is true for the majority of contexts considered, including the burnt structures of level 6 at Sabi Abyad (see **section 5.7.2**) or Building 200 at Mylouthkia (see **section 7.6.2**). It is certainly true for the majority of settlement contexts at Jerablus that are relatively devoid of small finds (see **sections 6.6.2-4**) and for the negative features at Mylouthkia with their rich, largely fragmentary assemblages, and their complex stratigraphic evidence of multiple depositions (see **sections 7.6.3**). Factors that cause problems for identification of *in situ* contexts or for efforts to reconstruct the function and use of space are several. Key amongst them are site formation processes, that operate to create, alter and remove anthropogenic material and contexts. As observed above (and elsewhere), there is a widespread neglect of site formation study in archaeological reconstructions. More significant however are the theoretical limitations of much of the literature on site formation and – for that matter – of the archaeological conception of the relationship between material remains and past human activities.

In the context of the three case studies (**Chapters 5-7**), flaws in the archaeological conception of the habitation stage, in archaeological categorisation processes and in the standard classifications used in site formation studies are clearly visible. For example, simple categorisations involving the definition of primary, secondary or defacto refuse are inadequate for the majority of the settlement contexts considered. Indeed, the challenge of separating primary and secondary depositions or of identifying the signatures of particular natural or human agents is too great for most contexts, including burnt structures like Building 2 at Sabi Abyad (see **section 5.7.2**) or (possibly) Building 200 at Mylouthkia (see **section 7.6.2**), particularly in the absence of microstratigraphical analyses. This is not the result of poor technique or recording; instead, it is an outcome of the complexity of formation processes. Regardless of whether or not the aforementioned structures were destroyed in a single event (e.g. a conflagration) they contain material that that was deposited over a longer time period. Indeed, analysis of artefactual deposition in a variety of contexts across the sites, whether in a building, a room or a pit, reflects the complex and changing history of their occupation (a point that can in turn can be linked to notions concerning the life-history (or biography) of artefacts considered in **section 3.3**). In other words, the majority of contexts provide evidence of a palimpsest of activities associated with the habitation, abandonment or post-abandonment phases of occupation.

Of particular interest to this study is the recognition and articulation of abandonment practices that can include the deliberate deposition of material (including the selection of particular categories for deposition) and/or, potentially, the removal of certain other categories. The sparse character of the artefactual assemblages recovered from some building contexts (e.g. Building XII at Sabi Abyad (**section 5.7.2**), the majority of structural contexts at Jerablus (**sections 6.6.1-4**) or Building 152 (**section 7.62**) at Mylouthkia) arguably reflect either the implementation of tight cleaning regimes, that involve the discard of material off-site, or the operation of curate behaviour on - or after - abandonment. The pattern of small find occurrence at the Early Bronze site of Jerablus in particular reflects the rigorous operation of site maintenance procedures and a tradition for removing material from structures at or after abandonment. However, in certain contexts analysed from the two prehistoric sites of Sabi Abyad and Mylouthkia significant concentrations of cultural material were deposited in particular structures (or rooms) or other features that contained, or were presumably located close to, dwellings (as at Mylouthkia). Such a marked distinction between Jerablus and the other two sites has been interpreted in the context of wider socio-political disparities, however more subtle distinctions between each of the sites have further been interpreted in terms of the local strategies that are culturally and historically contingent (see, e.g. **sections 5.8, 6.7, 7.7** and 8.2; see also below).

Clearly, such variety in the character of artefactual deposition at each of the three case study sites naturally creates problems for conventional spatial analyses that are founded on the identification and assumption of synchronous, spatially discrete, activities of past inhabitants. And yet, the patterning of artefactual deposition across the sites is not a by-product of the mechanical operation of distorting site formation processes that are comparable to natural laws (see **sections 2.2.1** and **2.6**). Artefactual deposition across a variety of contexts at all three case study sites frequently fails to correspond with those notions of utility, of convenience or economic value that commonly underlie archaeological classification of artefacts and human behaviour associated with their treatment and deposition. These are modern concepts and constructs, on which are founded many of the categories that archaeologists employ. Following Miller (1985) and others (e.g. Chapman 2000a; see **section 3.3**), artefacts embody the principles of human categorisation processes; the challenge lies in distinguishing between the principles of categorisation devised and employed by archaeologists in the analysis of ancient material culture, and the principles of categorisation belonging to the ancient people that produced, used and deposited the materials. Where artefactual assemblages fail to correspond to notions of utility or economic worth (e.g. where they are found abandoned but still serviceable, or where there is evidence of deliberate destruction), and there is good reason to infer that the patterns witnessed are the intentional outcome of past human activities, then there is opportunity to interpret the patterning in terms of social practices and value systems that are not necessarily a mirror of our own.

In all three case studies there are situations where the treatment and abandonment of artefacts and of contexts bears witness to the difference, the Otherness, of the past. This otherness is rooted in alternate worldviews, worldviews that embody different principles of categorisation, different traditions and different histories. For example, at Sabi Abyad there is the extraordinary event of the conflagration that engulfed the Level 6 village preserving structures and deposits, including some rooms filled with a mix of complete and fragmentary artefacts, some of which were deliberately broken (see **sections 5.8** and **8.2**). At Jerablus, the deposition of intact Uruk ceramics in pre-fort levels, the inclusion of artefacts in the fabric of buildings or the burial of the dead with rich funerary assemblages in graves that cut through earlier deposits also bear testament to different social practices, value-systems and ways of viewing the world (see **sections 6.7** and **8.2**). Lastly, the complex and ephemeral site of Mylouthkia reveals extraordinary concentrations of cultural material in certain hollows, some of which were inhabited, as well as patterns of curation and abandonment of artefacts that similarly express different practices, values and beliefs (see **sections 7.7** and **8.2**).

Finally, then, from the three site analyses it is clear that the treatment of artefacts on abandonment and the patterning of artefactual deposition on the sites can best be interpreted as the outcome of social practices that are historically and culturally contingent; the artefacts (structures and objects) and their treatment at deposition have contextually specific social and symbolic meaning.

9.3 INTERPRETING ARTEFACTUAL DEPOSITION

In **section 3.4**, it was argued that the demonstration of intentionality (whether conscious or unconscious) in artefactual deposition should be of crucial importance to our interpretations of settlement occupation and abandonment. The ability of the archaeologist to distinguish between intentional and unintentional acts is dependent on the resolution afforded by excavation techniques, recording, retrieval strategies and various classification procedures. In order to reconstruct artefactual deposition in such a way as to afford such distinctions (and thereby facilitates the elucidation of the meanings of artefactual deposition), it is necessary to utilise a contextual approach that relies on high degree of contextual and artefactual recording and is sensible to the variations within and between contexts and assemblages.

By championing a contextual approach, this study follows the lead of archaeologists such as Hodder (1987a-b, 1991a) and Barrett (1987). There is, however, some variation in the archaeological definition of context (see, e.g. **section 4.3.2**). In particular, there remains some uncertainty as to whether the archaeological context is in any way comparable to the historical or cultural context (or Schiffer's systemic context). This uncertainty arises from doubts concerning the practice of archaeology and the role of the individual archaeologist as interpreter; it is further exacerbated by an awareness of a myriad of site formation processes and the realisation that they cannot all be identified. The definition of contexts in the field has clearly impacted on their excavation and interpretation. In particular, the focus on the identification of primary activity areas and on architecturally defined space has driven the definition of contexts, occupation levels and the collection of artefactual assemblages. A further related uncertainty lies in the spatio-temporal definition of contexts and is of relevance to both processual and post-processual approaches. Both have endeavoured to focus on the dynamic of past societies; however, there are problems with the concept of the archaeological record and the definition of the units of analysis that archaeologists employ. Most notably, the units of analysis that are used (e.g. contexts such as walls, floors, pit cuts or fills) seldom invoke temporal measures of duration and are commonly conceptualised as single events (Lucas 2001: 157). As noted in the preceding section, few of the contexts analysed in the three case studies can be solely related to the habitation phase of settlement occupation or, for that matter, to primary activity; the majority are palimpsests of habitation, abandonment and post-abandonment phases of occupation.

Awareness of the limitations of archaeological practice and of the equifinality associated with site formation processes in general, must lead one to greatly doubt the character of artefactual assemblages and their (synchronic) associations, outside of their archaeological reality at the moment of their recovery. Such doubts concerning the associations between objects and between objects and their contexts naturally have implications for chronology and spatial analyses. In turn, as observed above, they impact on wider understandings or interpretations of settlement occupation and of past societies. Perhaps, then, it is necessary to rethink the methods and terminology involved in the excavation and recording of new sites within the region of interest? However, such is not the remit of this work. Instead, this study has utilised data from three sites that employed differing but largely standard excavation, recording and collection strategies. This exercise has involved working with existing information. Working within the constraints of data that is dependent on 'others' (in its generation, recording, collection and classification) it is nevertheless possible to entertain different interpretations of the character of the built-environment and the nature of artefactual deposition within that environment.

In order to improve understanding of particular contexts or assemblages, as well as the understanding of the wider settlement, it is necessary in the first instance to analyse and compare a variety of contexts and artefactual assemblages (see **section 8.3** for more detailed discussion of contexts of analysis, the meanings of things and the life histories of artefacts). It is not enough to concentrate on (or favour) particular contexts (e.g. 'houses' or activity areas associated with production or use), or to separate materials for analysis without comparison. Through the comparison of disparate assemblages and artefactual categories and their associations, similarities and differences can be inferred that may in turn be related to differences in artefact meaning or in the treatment of certain contexts and artefacts. Variables that move beyond functionally inspired typologies are also desirable as they provide additional and sometimes different, but no less important, information concerning the treatment of artefacts in life and at their deposition. A more sophisticated understanding of the character of artefactual deposition should also require the investigation of other data that might be found in contextual association, for example debitage from chipped stone manufacture or paleoenvironmental remains. These have largely been ignored in this study, but their importance to the identification and interpretation of site maintenance or abandonment activities is clear. The adoption a more holistic approach to the comparative analysis of contexts and the analysis of artefactual attributes is also essential for attempts to understand and/or reconstruct the temporal (and historical) dimension of settlement.

Through adopting a mufti-scalar approach (from artefactual attribute to context to occupation level to site and so on) artefactual deposition can be interpreted in a new light and used to reconstruct historical interpretations in new ways (see, e.g. Jerablus where the abandonment of artefacts and structures could be connected with the infilling of buildings to build anew, the shifts from residential to cemetery use, the construction of a fortification wall and drainage systems, the raising of the height of the settlement above the alluvium, and the location 4km from the city of Carchemish on the west bank of the Euphrates (see **sections 6.8** and **6.9**). Such interpretations need to invoke new notions concerning the importance of places and of artefacts in the minds of past inhabitants, an importance that is attached to the history of a settlement, of a particular structure or of an artefact.

9.4 FURTHER REMARKS APROPOS ARCHAEOLOGICAL PRACTICE: FUTURE DIRECTIONS

Whilst advocating a holistic approach to the analysis of settlements, contexts and artefacts, this thesis has also emphasised the need for both self-examination and for the critical awareness of the theoretical and methodological frameworks that archaeologists apply. This position is akin to that taken by Hodder and others in promoting first a contextual approach and, latterly, a reflexive approach to the analysis and interpretation of the archaeological (see e.g. Barrett 1987; Chadwick 1998; Hodder 1997, 1999, 2001; see also **section 3.2.3**). Using his excavations at Çatalhöyük, Hodder (1997; 2001) has set out to define a reflexive method to archaeological excavation (see **section 1.2**). It could be argued that the practical contribution is not new as many of the techniques and methods employed are standard archaeological practice; the difference lies in the positive recognition of interpretation as taking place at the trowel's edge (Hodder 1999: 92-98). In the present case, the critical stance that has been taken can be seen as a natural product of the realisation of the impact of, for example, of functionalist frameworks not only on processual analyses of settlement and of site formation processes but also on more recent (post-processual) works. It can also, arguably, be seen as being symptomatic of an interest in the fundamentally social character of material culture, experience, knowledge and practice. And yet, although this study accords with Hodder et al.'s concerns, it has not been the aim to forge a new methodology for the analysis of artefactual deposition. Instead, working with existing site records, this study has questioned existing attitudes to contexts and artefacts and suggested different directions for interpretations of artefactual deposition with the aim of advancing archaeological understanding of the complex interconnectedness of artefacts, people, places and behaviour. In this respect, this thesis is in agreement with Andrews et al.'s (2000) distinction between archaeological method (or practice) and historical interpretation, wherein the ultimate goal of archaeological fieldwork is to achieve historical knowledge.

To end on a practical note it is clear that a number of problems encountered in the course of the analyses contained within this study could be diminished in future analyses through the implementation of improvements in excavation, recording and retrieval strategies. In particular, the nature of site excavation, of digging by context and thinking by 'occupation phase' would benefit from the rigorous three-dimensional recording of artefacts (i.e. horizontal 'x' and 'y' and vertical 'z' locations for all artefacts). Finer stratigraphic detail would facilitate contextual analysis and future reanalyses. For example, it has been noted above (see, e.g. **Chapter 4**) that spatial analyses commonly rely on the 'x' and 'y' location of artefacts but the additional consideration of the 'z' (vertical) location provides a further temporal dimension to artefact deposition both between occupations phases and within the lifetime of individual contexts. This is most readily demonstrated by certain contexts at Sabi Abyad where horizontal plotting of artefacts reveals great concentrations of materials in burnt deposits in certain rooms and therefore seems to enforce ideas relating to the *in situ* occurrence of finds as a product of catastrophic firing. However, consideration of the vertical distribution of artefacts within the fills of one of the most productive rooms suggests questions such a straightforward assumption that the concentration is indeed the product of a single episode (or event).

In addition, as noted above, this study has ignored ecofactual (e.g. faunal and palaeobotanical remains) material, which in combination with microdebitage might also afford greater resolution on the use and abandonment of artefacts and space. These have been largely sidelined in the analyses contained within this study, however they are an important remnant of past occupations as they provide data for interpreting the character of deposits and – by extension – the meaning of associated finds. For example, the recognition of middening activity in certain contexts might be greatly assisted by the evidence of food scraps that can be supplied by faunal or other palaeoenvironmental techniques. Therefore, there should be greater emphasis placed on the sieving and flotation of material. Such an exhortation is far from new and the implementation of rigorous and comprehensive sampling strategies is commonplace in archaeological excavations in, for example, the British Isles.

In East Mediterranean and Near Eastern archaeology however sampling strategies are often inadequate, with sieving and/or flotation reserved for special contexts such as hearths or graves. Naturally, the sheer volume of deposition on Tell sites makes the implementation of more sophisticated and detailed sampling strategies costly in time and money; too costly in the estimation of many. More fundamentally, the returns are not deemed to merit the costs involved. Why? Arguably, the answer to this question lies in the way in which archaeologists conceptualise human behaviour and past societies. Commonly, sampling strategies are implemented in order to recover small artefacts, dating material (e.g. for C^{14} dating) or economic-environmental data. As noted, a judgement is frequently made as to the most promising contexts for sampling, similarly a judgment can be made not to sample not only because a particular context does not look promising but also because enough samples of similar contexts have already been taken to establish the economy, environment and/or date of a particular habitation phase. Once again there appears to be a precedence given to certain aspects of life (e.g. economy) over others, and also a separation of economy or environment from other facets of human life (e.g. beliefs, social practices or emotions). The precedence of one aspect (or 'system') over another and the very separation of different aspects for analysis bespeak a functionalist conception of society. Furthermore, the precedence of economy over, say, beliefs is in keeping with the classification and discussion of human society in terms of an (socio-) economic evolution. This thesis has argued against the false compartmentalisation of different aspects of society and, in particular, considered artefactual deposition to be invested with socio-cultural and ideological, as well as practical (or even functional), meanings. Therefore, if the associations within and between contexts and their assemblages are a key to the elucidation of the socio-cultural meanings invested in artefactual deposition it follows that the implementation of sampling strategies must improve archaeological understanding, not simply of a site's economy, but also of the formation and character of particular contexts, artefactual assemblages and the social practices and beliefs they embody.

Finally, this thesis has been critical of the theoretical frameworks and assumptions that underlie archaeological practice, it has also emphasised the complexity and variety of human actions, and of the meanings attached to places and to things. The success of attempts to pattern artefactual deposition and the associated social practices rests on the ability of the interpreter to reconstruct the complexity and variety of contexts, deposits and artefactual attributes. As a caveat to this, it is also important to realise that the excavator and the interpreter are not necessarily the same; consequently, the ability of the interpreter to piece together the evidence is also dependent on both the excavation techniques employed (including retrieval strategies) and the quality (and availability) of the records. Nevertheless, using existing methods for the excavation, retrieval and recording of archaeological remains in combination with the interpretive approaches discussed in **sections 3.3** and **3.4**, archaeologists have at their disposal the wherewithal to achieve new insights into the human and social dimension of artefactual deposition in settlement contexts.

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APPENDIX 1

NOTES ON BROAD FUNCTIONAL CATEGORIES AND ARTEFACT CLASSES

This appendix is designed as a supplement to section 4.3.3 where the broad functional categories were outlined. It is not intended that this should provide an exhaustive description of various artefact classes, parallels with other sites and reasons for their present assignment to particular categories. Such an intention would run counter to the arguments set out in Chapters 2 and, more tellingly, in Chapter 3. For example, it has been argued that the naming of artefacts, and the related assumption of their function and meaning, frequently involves the imposition of Western values on the past. Further, such classificatory systems are inflexible and make no allowance either for variety of meanings or for changes in meaning and use during the life history of an object. Thus, the division of assemblages into a limited number of broad functional categories has served a heuristic purpose only and, consequently, afforded a means of comparing assemblages between various contexts.

Nevertheless, the ascription of function to artefacts and in turn of groups of artefacts to functional categories in the present work has largely followed standard archaeological and ethnoarchaeological identifications. A particularly useful source of information regarding artefact classes from Sabi Abyad is Verhoeven's (1999: 233-60) Appendix 1, where many ethnographic and archaeological parallels are cited (see also Akkermans et al. 1996). For Mylouthkia aside from some preliminary studies (e.g. Elliott 1983, 1991; Jackson 1996), a definitive discussion of the material must await the final publication (Peltenburg et al. forthcoming). However, the existing site reports for Lemba-Lakkous and Kissonerga-Mosphilia provide useful artefactual parallels (Peltenburg 1985a, 1998).

There follows below a more detailed discussion of each of the broad functional categories utilised that considers artefact classes by site and also refers to wider range of sources that support their attribution.

Storage/Administration

As stated in section 4.3.3, this category includes a range of artefacts that are commonly considered to be indicative of record keeping, storage or the assertion of property or other rights (as in the case of specific seal stones or seal impressions). Only Sabi Abyad and Jerablus yielded such artefacts with the former proving particularly rich in sealings and tokens. Jerablus has yielded few such finds, tokens are not a feature of the site but a cylinder seal, impressed clay cone and various seal impressed pottery sherds testify to the existence of administrative activities (unsurprising given the character, occupational period and location of the settlement).

Some of the material from Sabi Abyad and, to a lesser extent, from Jerablus has already been the subject of analysis and discussion (e.g. Akkermans and Duistermaat 1997; Duistermaat 1996; Verhoeven 1999: 237, 239-40; Peltenburg 1997; Peltenburg et al. 2000). Of wider interest is Schmandt-Besserat's (1977, 1985, 1986, 1992) work that has cogently and convincingly argued that tokens represent the precursors to writing systems and individually represent a record of particular goods. Others have also suggested that some tokens might be gaming pieces or abstract representations of the human form (e.g. Broman-Morales 1990).

Personal ornament

This category covers a broad range of artefacts commonly worn about the person and includes, for example, beads, necklaces, bracelets, earrings, pins (to fasten clothing) and labrets. A variety of materials are used including baked clay, stone, metal, shell and bone or antler (antler beads are only found at Mylouthkia). The most common finds from settlement contexts at the three sites are beads and pendants, where they frequently occur individually. Reconstructible necklaces and bracelets, however, as well as metal earrings (lead and copper alloy), pins and bracelets are recovered from the Area IV graves at Jerablus. Labrets (lip and ear ornaments) are only found at Sabi Abyad, parallels for which may be found at Ali Kosh (Hole et al. 1969: 235-6).

A range beads and pendants from Late Neolithic occupation levels at Sabi Abyad have already been analysed and discussed (e.g. Spoor and Collet 1996; Verhoeven 1999: 240-41).

Weaponry

The category of weaponry covers artefacts such as daggers, knives and spearheads that occur - on occasion - only at the site of Jerablus Tahtani. These are predominantly of copper alloy and are generally recovered from the tombs at the site. As noted in section 4.3.3, artefacts associated with this category will receive only limited attention, given the limited nature of their occurrence.

Heavy processing equipment

This category covers the majority of the ground stone artefacts recovered from the three case study sites. The majority of such artefacts are used in grinding, hammering and pounding actions; most are associated with the processing of foodstuffs and/or pigments. Artefact classes that are included in this category are querns (or grinding slabs), rubbers, grinders, pestles and mortars. Of the three assemblages, Mylouthkia is particularly rich in artefacts associated with this category. Numerous artefacts associated with this category from all three sites have already appeared in publication (e.g. Collet and Spoor 1996; Elliott 1983; Peltenburg et al. 2000, forthcoming). In addition, Verhoeven (1999: 233-4) has considered a range of ethnographic and archaeological parallels for material from

Sabi Abyad that are equally applicable to the sites of Jerablus and Mylouthkia.

Cutting tools

This category comprises axes, adzes and chisels. The analysed contexts from Sabi Abyad and Jerablus yielded few such finds and little variety, however, Mylouthkia is rich in artefacts belonging to this category. Furthermore, there is at Mylouthkia a great variety in form and size of such finds that might in turn be related to different functions. Such artefacts are commonly believed to be used for the felling of timber and/or for wood-working (see, e.g. Braidwood and Howe 1960: 45; Mellaart 1967: 215; Voigt 1983: 262). And yet, from the author's own analyses of material from Mylouthkia it is by no means clear that all such artefacts were used for working wood. This is supported by other studies that have indicated that axes were unhafted and used in the breaking up of hard materials (e.g. as pounders on rocks or nuts) or in the preparation of skins or rushes (Howe 1983: 55; Seeden 1982: 58; Verhoeven 235-6). In other words, though the selection of the term 'cutting tools' for this category of artefact serves the present heuristic purposes, it is potentially misleading in its limited assertion or attribution of function. In the case of miniature examples of axes and adzes that occur at Sabi Abyad, Collet and Spoor (1996: 424) have suggested that these were used in ritual or 'luxury' contexts and not domestic activities.

Textile production

This category covers artefacts that are commonly associated with sewing and textile production. And includes awls, needles, loom weights, perforated pottery discs and spindle whorls. Such artefacts are largely made from bone and pottery, although wooden examples are attested ethnographically (Watson 1979: 174-180). Of these finds the most functionally enigmatic are perforated pottery discs. Their inclusion in this category is made on the basis of some existing studies that have argued that this class of artefact served as rudimentary spindle whorls (e.g. Keith 1997: 136-9; see also Akkermans 1993a: 159-60; Liu 1978). However, contrary interpretations of the function of perforated pottery discs do exist. For example, Peltenburg finds little reason to believe that the examples from Kissonerga-Mosphilia could function as spindle whorls (see Peltenburg 1998a: 198-9). Similarly, others have argued that they were variously used as tokens (Schmandt-Besserat 1992: 17, 77-84, 108), pendants (Bader 1993: fig. 2.15) or jar stoppers (Mallowan and Rose 1935: 90).

Of the rest, awls and - to a lesser extent – needles are most common at the case study sites, with the exception of Jerablus. Awls (known as points at Mylouthkia) are commonly associated with hide and cloth working and basketry (see, e.g. Campana 1989: 118, 131-2; Watson 1983: 362)

Ideology/Ritual

This category covers artefacts that by their form or contextual associations are most readily interpreted as having some symbolic or ideological significance (e.g. figurines). Figurines have been recovered from all three case study sites, however the most notable occurrence is at Sabi Abyad followed by Mylouthkia. In the case of the former, figurines are predominantly of baked and unbaked clay (see Collet 1996; Verhoeven 1999), whereas at Mylouthkia figurines are of stone and pottery (only fragmentary examples of the latter survive) (Goring, forthcoming). Verhoeven (ibid.: 231-9) has discussed the human and animal figurines from the Burnt Village at Sabi Abyad in the context of socio-economic relations within the settlement arguing that the deliberate defacement of human figurines (they are all headless) 'accompanied and sanctioned' economic transactions and social bonds between individuals or groups. As previously noted, certain scholars (e.g. Schmandt-Besserat 1992) have argued that tokens may be representative of commodities, similarly it has been suggested that animal and human figurines might be viewed in the same way.

Containing equipment

This category includes both stone and pottery vessels, as well as pot lids, stoppers and pot stands. Only those pottery vessels that were recovered as whole pots or those pots that can be presumed to have been complete at the point of deposition (i.e. that are reconstructible) are included. As noted in section 4.3.3, there is some difficulty in presented by counts involving such items, that are reliant on painstaking reconstruction and hence counts might be expected to frequently represent a minimum figure. A variety of vessels have been recovered from the three case studies and it may be assumed that these were utilised in the storage and preparation (cooking) of a variety of goods. Certain vessels might also have had some greater significance (economic or prestige) than others, however in the present study no functional or other sub-divisions have been made. Greatest uncertainty exists as to the functional attribution of artefacts such as pot lids or stoppers. Pottery from Sabi Abyad Levels 6 and 5 (from the 1989-1993 excavations) has already appeared in publication (Akkermans 1996; note also Verhoeven 1999).

Projectiles

This category is only applicable to the sling missiles recovered from some contexts at Tell Sabi Abyad, both in groups (or caches) and individually. As Verhoeven notes (1999: 241-2; see also Watson 1979: 187), these artefacts are common on prehistoric and historic sites in the Near East (e.g. Tell es-Sawwan, Hassuna, Tepe Gawra and Mersin) and are widely interpreted on the basis of ethnographic analogies as weapons. Similarly, Mortenson (1982: 214) has suggested that they might have been use for hunting. However, Starr (1937/39) suggested that similar artefacts from Nuzi were 'counters' (e.g. a type of token); an argument that has found support from others (e.g. Lamberg-Karlovsky and Beale 1986: 190).

Other

This category covers a considerable range of artefact classes that quite simple do not fit into the other categories above. As noted in section 4.3.4, this category generally includes artefacts that occur only very rarely or are too fragmentary for identification and categorisation. An exception is presented by pivot stones, which occur in particularly significant numbers at Jerablus.

APPENDIX 2

TELL SABI ABYAD DATABASE

CONTENTS

NOTES ON THE FIELDS UTILISED IN THE SABI ABYAD DATABASE

There follows a brief note defining each of the fields used in the Sabi Abyad database. This database differs in a number of ways from those of Jerablus Tahtani and Kissonerga-Mylouthkia. Field descriptions are listed below. Where data is unavailable the cells are left blank.

DATABASE FIELDS: DEFINITIONS

Building no:	not applicable to Open Areas and T12 midden deposits.
'Room' no:	not applicable to Building IX (tholos), Open Areas and T12 midden deposits.
Square no.:	refers to the excavation grid square.
Locus no.:	refers to the context of recovery.
Lot no.:	refers to the recovery sample. Lots are changed daily.
Site find no.:	project small find number.
Class:	artefact classification follows the classification system used by excavation project (see **Appendix 1**)
Material:	refers to the material of manufacture and follows simple divisions (e.g. pottery, stone, clay, metal, bone, antler and shell)
Length **Width** **Thickness** **Height** **Diameter**	
Condition:	artefacts are classified as complete, damaged or broken.
Curation:	artefacts are classified as curated (c) or expedient (e) (for general distinction see **section 4.3.3**). Where the categorisation is not possible or appropriate 'na' appears.

BURNT VILLAGE LEVEL 6, BUILDING I

BUILDING	ROOM	SQUARE	LOT	LOCSUS	SITE FIND No.	CLASS	MATERIAL	EAST (m)	NORTH (m)	HEIGHT (m.a.s.l)	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
6.1	6.1.1	r13	222	065	s91-300	bowl	stone	171.75	67.25	322.15				6.5	14	b	c
6.1	6.1.1	r13	157	049	p91-200	bowl	pottery	172	68.05							b	c
6.1	6.1.1	r13	157	049	p91-199	vessel	pottery	172	68							b	c
6.1	6.1.1	r13	214	110	s91-266	pestle	stone	172.5	69.75	322.33	10.9	7.2	5.9			b	c
6.1	6.1.1	r13	225	066	o91-424	slingmissile	clay	171.35	69.25	321.65	4.2				3.1	d	e
6.1	6.1.1	r13	225	066	o91-423	slingmissile	clay	172.35	69	321.71				4.3	2.9	c	e
6.1	6.1.1	r13	222	065	o91-274	spindle whorl	clay	172	67.6	322.11				1.8	3.3	d	c
6.1	6.1.1/2	r13	205	101	s91-227	axe	stone	172.3	69.6	322.4						d	c
6.1	6.1.1/2	r13	205	101	b91-17	bead	stone	173.25	70.4	322.86						d	c
6.1	6.1.1/2	r13	148	047	o91-188	slingmissile	clay	174.5	69	322.25				4.4	2.9	c	e
6.1	6.1.1/2	r13	148	047	o91-16	spindle whorl	clay	174.25	69.25	322.24				1.4	3.7	c	c
6.1	6.1.2	r12	053	028	p91-86	bowl	pottery	175.75	71	322.51				6.3	3.8	b	c
6.1	6.1.2	r13	230	067	s91-309	grinding slab	stone	174.6	67.75	321.91	12.8	10	6.8			b	c
6.1	6.1.2	r13	224	111	s91-301	hammerstone	stone	173.75	69.75	322.25	5.3	5	4.9			c	e
6.1	6.1.2	r13	230	067	o91-425	labret	clay	175	68.55	322.14				1.9	1.1	d	c
6.1	6.1.2	r13	212	107	s91-265	pendant?	stone	173.75	69.8	322.54	2.7	3.3	0.7			b	c
6.1	6.1.2	r13	155	050	o91-17	perforated disc	pottery	176.25	68.25	322.16				0.8	3.1	c	e
6.1	6.1.2	r13	215	111	s91-267	pestle	stone	173.5	69.7	322.33	10.1	7.5	6.7			c	c
6.1	6.1.2	r13	155	050	p91-120	bowl	pottery	175	68.5					6.5	9	b	c
6.1	6.1.2	r13	212	107	o91-363	token	clay	174.05	70	322.5				1.5	1.9	c	c
6.1	6.1.3	r12	062	035	j91-10	awl	bone	171.1	71.25	322.48	8	1.2	0.9			b	e
6.1	6.1.3	r12	119	051	j91-41	awl	bone	171.75	73.75		10.8	1.4	1			d	e
6.1	6.1.3	r12	999	057	p91-68	bowl	pottery	170.75	70.6	322.4				12	29	c	c
6.1	6.1.3	r13	220	108	p91-113	bowl	pottery	170.5	70.25	322.7				10.5	16	c	c
6.1	6.1.3	r12	095	051	s91-184	grinder	stone	170.9	71.5	322.15	4.7	4	4.8			c	c

BUILDING	ROOM	SQUARE	LOT	LOCSUS	SITE FIND No.	CLASS	MATERIAL	EAST (m)	NORTH (m)	HEIGHT (m.a.s.l)	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
6.1	6.1.3	r12	080	048	s91-93	grinding slab	stone	171.25	71.75	322.34	7.3	8	2.3			b	c
6.1	6.1.3	r12	095	051	s91-185	grinding slab	stone	174.25	72.9	322.16	11	3.5	12			b	c
6.1	6.1.3	r12	997	036	p91-91	husking tray	pottery	171.1	71.3	322.53	33	15	3			b	c
6.1	6.1.3	r12	042	021	j91-56	incised bone	bone	172.25	71.5		2.5	1.2	1			b	na
6.1	6.1.3	r12	998	051	s91-213	labret	stone	171.6	71.5	322.11	1.5	1.3	1			c	c
6.1	6.1.3	r12	087	054	o91-190	labret	clay	175	71.75	322.3				1.9	1.5	c	c
6.1	6.1.3	r12	042	021	s91-10	mortar	stone	172.2	71.5		4.6	3.5	1.5			b	c
6.1	6.1.3	r13	213	109	v91-2	ochre?	ochre?	171.25	70.45	322.66						b	na
6.1	6.1.3	r13	213	109	v91-2	ochre?	ochre?	171.25	70.5	322.66						b	na
6.1	6.1.3	r13	213	109	v91-2	ochre?	ochre?	171.25	70.55	322.66						b	na
6.1	6.1.3	r12	042	021	s91-9	pestle	stone	172.25	71.55		6	5	3.5			b	c
6.1	6.1.3	r12	092	051	s91-191	pestle	stone	170.75	71.5	322.22	8.6				5.7	c	c
6.1	6.1.3	r12	092	051	s91-190	pestle	stone	171.4	71.5	322.22	8.2				4.3	c	c
6.1	6.1.3	r12	998	051	s91-244	pestle	stone	170.55	71.25	322.32	7.1	5.6	4.8			c	c
6.1	6.1.3	r12	998	051	s91-186	pestle	stone	172.5	71.9	322.12	17.5	7.3	6.7			c	c
6.1	6.1.3	r12	096	054	s91-183	pestle	stone	175	71.3	322.09	14.9	6.9	6.3			c	c
6.1	6.1.3	r13	210	108	s91-264	pestle	stone	171.25	70.3	322.75	12.5				7	b	c
6.1	6.1.3	r12	069	030	s91-357	rubber	stone	175.5	71.5							b	c
6.1	6.1.3	r12	094	051	o91-192	slingmissile	clay	173.25	71.9	322.2	4.5				2.7	c	e
6.1	6.1.3	r13	219	114	o91-270	slingmissile	clay	171	70.25		3.1	2.7	2.1			c	e
6.1	6.1.3	r13	210	108	o91-364	token	clay	171	70.3	322.62	1	0.8	0.7			b	e
6.1	6.1.3/6/7/8/9		060	033	s91-39	pounder/grinder	stone	174.9	74.5	322.42						c	e
6.1	6.1.3/6/7/8/9		060	033	o91-11	slingmissile	clay	173.75	74.55	322.42	4.5				3.5	c	e
6.1	6.1.3/6/7/8/9		060	033	o91-11	slingmissile	clay	173.75	74.5	322.42	4.5				3.5	b	e
6.1	6.1.3/8	r12	052	027	j91-3	awl	bone	171.75	72	322.54	8	1.2	0.7			b	e
6.1	6.1.3/8	r12	052	027	j91-4	awl	bone	172.5	72.5	322.54	8.5	1.5	0.5			c	e
6.1	6.1.3/8	r12	995	034	j91-8	awl	bone	171.25	74.75		6	1.5				c	e
6.1	6.1.3/8	r12	063	036	j91-11	awl	bone	172.25	71.75		7	0.9	0.5			b	e

BUILDING	ROOM	SQUARE	LOT	LOCSUS	SITE FIND No.	CLASS	MATERIAL	EAST (m)	NORTH (m)	HEIGHT (m.a.s.l)	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
6.1	6.1.3/8	r12	063	036	j91-12	awl	bone	171.25	71.25		5.2	0.7				b	e
6.1	6.1.3/8	r12	063	036	j91-13	awl	bone	173.4	71		3.5	0.7				b	e
6.1	6.1.3/8	r12	065	036	j91-15	awl	bone	174.5	73.5		6.6	0.9	0.9			b	e
6.1	6.1.3/8	r12	045	023	s91-13	grinder	stone	172.75	72.85		5.1	4.1	4.5			b	e
6.1	6.1.3/8	r12	046	023	s91-16	grinding slab	stone	172.75	72.75		6.5	5.9	4			b	c
6.1	6.1.3/8	r12	052	027	s91-27	grinding slab	stone	173.25	72.75	322.53	8	7	3			b	c
6.1	6.1.3/8	r12	061	034	s91-45	grinding slab	stone	174.5	72.5	322.4	8	6				b	c
6.1	6.1.3/8	r12	995	034	s91-38	grinding slab	stone	173.9	73.25	322.42						b	c
6.1	6.1.3/8	r12	063	036	s91-49	grinding slab	stone	172	71.5		6	5	3			b	c
6.1	6.1.3/8	r12	052	027	s91-25	lid?	stone	171.25	71.1	322.54	5.5	4.5	1.3			b	c
6.1	6.1.3/8	r12	045	023	o91-4	perforated disc	pottery	172.75	72.8					0.8	5	b	e
6.1	6.1.3/8	r12	063	036	o91-15	perforated disc	pottery	171.25	71.8						4	d	e
6.1	6.1.3/8	r12	063	036	s91-48	pestle	stone	172.25	70.7		15.5				6	c	c
6.1	6.1.3/8	r12	063	036	s91-47	pestle	stone	171.6	70.7		10	6			5.5	c	c
6.1	6.1.3/8	r12	065	036	s91-63	pestle	stone	170.75	74.5		3.8	3.7	5.2			b	c
6.1	6.1.3/8	r12	052	027	s91-26	polisher	stone	172.9	74.1	322.53	7	4	2.5			b	e
6.1	6.1.3/8	r12	063	036	s91-46	pounder/grinder	stone	174.5	72		3.9	3.9	3.1			c	e
6.1	6.1.3/8	r12	063	036	s91-50	rubber	stone	173.5	71		8.5	11	3.5			b	c
6.1	6.1.3/8	r12	061	034	o91-14	slingmissile	clay	170.75	74.75	322.64	4.5				3	c	e
6.1	6.1.4	r12	081	049	o91-30	slingmissile	clay	177.1	71.25	322.28	3				2	d	e
6.1	6.1.5	r12	091	056	s91-358	bowl	stone	176	74.5							b	c
6.1	6.1.5	r12	090	056	s91-217	grinding slab	stone	176.5	74	322.38	4.3	4	4.8			b	c
6.1	6.1.5	r12	055	029	s91-32	pounder/grinder	stone	175.25	72.75		3.3	3.3	5			d	e
6.1	6.1.5	r12	040	019	o91-3	slingmissile	clay	177.05	73.5	322.8	3.5	3				c	e
6.1	6.1.5	r12	040	019	o91-3	slingmissile	clay	177.05	73.55	322.8	3.5	3				c	e
6.1	6.1.5	r12	040	019	o91-3	slingmissile	clay	177.05	73.6	322.8	3.5	3				c	e
6.1	6.1.5	r12	055	029	o91-9	slingmissile	clay	176.25	73.75		4.5				3.5	c	e
6.1	6.1.5/6/7		015	009	i28	awl	bone	176.5	78.25							b	e

BUILDING	ROOM	SQUARE	LOT	LOCSUS	SITE FIND No.	CLASS	MATERIAL	EAST (m)	NORTH (m)	HEIGHT (m.a.s.l)	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
6.1	6.1.5/7	r12	057	031	s91-33	grinder	stone	175.1	75.25		7	4.5		1.1		b	e
6.1	6.1.5/7	r12	057	031	s91-34	perforated disc	stone	175.4	76					0.5	3.5	c	e
6.1	6.1.5/7	r12	116	031	s91-81	polisher	stone	177.25	77.25					0.3	4.5	c	e
6.1	6.1.6	r12	115	038	j91-19	awl	bone	174.75	75.5	322.41	1.1	0.6	0.4			b	e
6.1	6.1.6	r12	083	052	s91-95	bowl	stone	173.7	76.5	322.36	4.5	2.2				b	c
6.1	6.1.6	r12	105	062	s91-192	grinding slab	stone	173.8	75.2	322.28	18	18	4.3			b	c
6.1	6.1.6	r12	083	052	o91-35	slingmissile	clay	174.5	75.3	322.34	4.1	3	2.5			d	e
6.1	6.1.6	r12	068	038	o91-261	slingmissile group (14)	clay	174.5	75.5	322.42	5				3.5	d	e
6.1	6.1.6/7/8/9		013	007	s107	bowl	stone	173.5	77.25							b	c
6.1	6.1.6/7/8/9		050	026	s91-19	grinder	stone	172.7	77.3							d	e
6.1	6.1.6/7/8/9		044	022	s91-12	grinding slab	stone	172.75	77.4							b	c
6.1	6.1.6/7/8/9		044	022	s91-355	grinding slab	stone	172.75	77.3							b	c
6.1	6.1.6/7/8/9		044	022	s91-111	grinding slab	stone	172.75	77.35		10.5	5	3			b	c
6.1	6.1.6/7/8/9		044	022	s91-11	mortar	stone	172.8	77.4		11	4	10			b	c
6.1	6.1.6/7/8/9		050	026	o91-6	perforated disc	pottery	172.7	77.4					0.6	3.3	d	e
6.1	6.1.6/7/8/9		050	026	s91-20	pestle	stone	172.7	77.35							d	c
6.1	6.1.6/7/8/9		050	026	s91-21	pounder/grinder	stone	172.7	77.25		5.6				6.4	b	e
6.1	6.1.6/7/8/9		050	026	s91-35	unworked flat stone	stone	172.8	77.35		13	10	2.5			c	na
6.1	6.1.7/9	r12	066	033	s91-59	grinding slab	stone	171.2	78.75		4.7	4.2	6.7			b	c
6.1	6.1.7/9	r12	084	053	o91-36	perforated disc	pottery	173	79					0.5	2.9	c	e
6.1	6.1.7/9	r12	106	053	s91-226	perforated disc	stone	175.3	78.3	322.4				3.3	3.7	b	e
6.1	6.1.8	r12	067	037	s91-61	bowl	stone	171.6	75.55					2.7	8	b	c
6.1	6.1.8	r12	114	047	p91-125	bowl	pottery	172.5	75					11	21	d	c
6.1	6.1.8	r12	114	047	p91-67	bowl	pottery	172.7	74.7	322.24				7.9	7.2	c	c
6.1	6.1.8	r12	079	047	s91-92	disc	stone	172	75.5	322.24	6.3	3.4	1.4			b	e
6.1	6.1.8	r12	067	037	s91-62	grinding slab	stone	172.5	74.75		4.2	3.7	4.1			b	c
6.1	6.1.8	r12	114	047	p91-69	jar	pottery	172.6	75	322.21				14.5	12.5	c	c
6.1	6.1.8	r12	067	037	s91-60	mortar	stone	172.05	75.6							b	c

BUILDING	ROOM	SQUARE	LOT	LOCSUS	SITE FIND No.	CLASS	MATERIAL	EAST (m)	NORTH (m)	HEIGHT (m.a.s.l)	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
6.1	6.1.9	r12	108	063	o91-193	disc	pottery	171.5	77	322.37				0.7	4.3	c	e
6.1	6.1.10	q12	202	050	s93-147	grinding slab	stone	169.4	72.5	321.98	18	16.5	2.3			b	c
6.1	6.1.10/11		145	022	s68	arrow shaft straightener	stone	168.25	74.55							c	c
6.1	6.1.10/11		145	022	s87	grinder	stone	168.25	74.5							c	e
6.1	6.1.10/11		145	022	o21	perforated disc	pottery	168.25	74.6							c	e
6.1	6.1.10/11		145	022	o20	perforated disc	pottery	168.3	74.55							c	e
6.1	6.1.10/11		152	022	11	slingmissile	clay	168.3	74.5							d	e
6.1	6.1.11	q12	184	051	j93-6	awl	bone	169.25	75	322.82	6	0.8	0.3			b	e
6.1	6.1.11	q12	167	045	p93-12	jar	pottery	166.75	71.5					13.2	10	b	c
6.1	6.1.11	q12	167	045	o93-11	stopper	clay	166.9	72.1		5.8	4.6	2.8			d	e
6.1	6.1.15/16/17/		159	046	s91-285	rubber	stone	172.25	63.5	322.06	13.3	7.3	8.3			b	c
6.1	6.1.15/16/17/		153	046	j91-16	spatula	bone	174.25	64.8	322.12	9.8	1.8				c	e

BURNT VILLAGE LEVEL 6, BUILDING II

BUILDING	ROOM	SQUARE	LOT	LOCUS	SITE FIND No.	CLASS	MATERIAL	EAST (m)	NORTH (m)	HEIGHT (m.a.s.l)	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
6.II	0	q13	264	085	j91-17	awl	bone	162.75	64.65		3.4	0.9	0.4			b	e
6.II	0	q13	311	113	j91-23	awl	bone	167	62		4	0.9	0.4			b	e
6.II	0	q13	314	113	j91-25	awl	bone	166.5	62.1	321.54	6.7	0.9	0.7			b	e
6.II	0	q13	264	085	s91-77	axe	stone	162.1	62.75	321.78						b	c
6.II	0	q13	265	085	s91-80	axe	stone	162.75	64.5	321.89	5.4	3.8	0.9			c	c
6.II	0	q13	270	101	s91-94	axe	stone	165.75	67	322.41	3.2	1.6	1			c	c

BUILDING	ROOM	SQUARE	LOT	LOCUS	SITE FIND No.	CLASS	MATERIAL	EAST (m)	NORTH (m)	HEIGHT (m.a.s.l)	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
6.II	0	q13	283	109	s91-107	bowl	stone	167.25	65.05	322.06	5.5	3.5	0.8			b	c
6.II	0	q13	292	111	s91-283	bowl	stone	165	62	321.45	3.8	1.8	0.6			b	c
6.II	0	q13	263	085	s91-55	bowl	stone	160.85	66	322.08	13	7	4			c	c
6.II	0	q13	293	110	p91-123	bowl	pottery	165	61							d	c
6.II	0	q13	265	085	p91-203	jar	pottery	164.5	65.5							b	c
6.II	0	q13	283	109	s91-103	grinder	stone	165.75	66.75	322.24	20	10		3.8		b	e
6.II	0	q13	283	109	s91-105	grinder	stone	165.75	64.6	322.03	6.7				4.5	c	e
6.II	0	q13	283	109	s91-106	grinder	stone	166.25	65.2	322.06	18	13		5.9		c	e
6.II	0	q13	263	085	s91-57	grinder	stone	162.8	64.6	322.05	6.9	7.3	6.3			c	e
6.II	0	q13	264	085	s91-71	grinder	?	162.75	64.55	321.9	6.5				5	c	e
6.II	0	q13	264	085	s91-74	grinder	stone	162.7	64.65	321.9	11				5.4	c	e
6.II	0	q13	264	085	s91-76	grinder	stone	162.7	64.8	321.9	15.5				4.9	c	e
6.II	0	q13	264	085	s91-78	grinder	stone	162.8	64.5	321.9						c	e
6.II	0	q13	265	085	s91-79	grinder	stone	162.7	64.6	321.89						b	e
6.II	0	q13	264	085	s91-98	grinder	stone	164.5	64.55	321.9	6.5				5	c	e
6.II	0	q13	283	109	s91-104	grinding slab	stone	165.75	65.25	322.09	20	19		3.6		b	c
6.II	0	q13	287	109	s91-109	grinding slab	stone	166.75	63.75	322.11	14.3	8		3.7		b	c
6.II	0	q13	254	085	s91-29	grinding slab	stone	162.75	67.3	322.28	8.5	7.5	4.5			b	c
6.II	0	q13	256	085	s91-41	grinding slab	stone	162.8	64.55	322.3	27	17	5.5			b	c
6.II	0	q13	260	085	s91-44	grinding slab	stone	162.8	64.7	322.2	24	15	3.5			c	c
6.II	0	q13	263	085	s91-58	grinding slab	stone	162.75	64.6	322.05	7	5	4			b	c
6.II	0	q13	264	085	s91-73	grinding slab	stone	162.7	64.5	321.9	8	7.5	3.5			b	c
6.II	0	q13	254	085	s91-30	mortar	stone	162.75	67.25	322.28	9	8	2.5			b	e
6.II	0	q13	262	090	o91-18	perforated disc	pottery	162.5	67.6	322.26			0.6	4.5		b	e
6.II	0	q13	292	111	o91-49	perforated disc	pottery	165	62.15	321.63						c	e
6.II	0	q13	263	085	s91-56	pestle	stone	162.7	64.7	322.05				25.5	8.1	c	c
6.II	0	q13	264	085	s91-70	pestle	stone	162.75	64.7	321.9	6.5				5.1	c	c
6.II	0	q13	306	117	s91-130	rubber	stone	168.6	67.1	321.91	11	9	1.3			b	c

BUILDING	ROOM	SQUARE	LOT	LOCUS	SITE FIND No.	CLASS	MATERIAL	EAST (m)	NORTH (m)	HEIGHT (m.a.s.l)	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
6.II	0	q13	254	085	s91-31	rubber	stone	162.75	67.35	322.28	11	5.5	3			b	c
6.II	0	q13	262	090	s91-52	rubber	stone	162.5	67.5	322.05	14	7.5	1.6			b	c
6.II	0	q13	262	090	s91-53	rubber	stone	162.5	67.55	322.05	8	6.5	2.2			b	c
6.II	0	q13	264	085	s91-75	rubber	stone	162.7	64.55	321.9	12	11	1.9			c	c
6.II	0	q13	318	113	o91-112	slingmissile	clay	168.25	61.75	321.38	4.3			3.5		d	e
6.II	0	q13	265	085	o91-21	slingmissile	clay	162.8	64.65	321.89	4.7				3.2	c	e
6.II	0	q13	265	085	o91-21	slingmissile	clay	162.7	64.75	321.89	4.5				2.5	c	e
6.II	0	q13	281	109	o91-41	slingmissile	clay	167.25	65.1							b	e
6.II	0	q13	179	062	o35	slingmissile group	clay	167.5	66.5							b	e
6.II	0	q13	284	109	o91-42	spindle whorl	clay	166.5	63.75	321.96						c	c
6.II	0	q13	284	109	o91-43	spindle whorl	clay	166.75	64.25	321.96						c	c
6.II	0	q13	263	085	s91-54	token	stone	160.75	65.75	322.08					3	c	e
6.II	0	q13	298	113	o91-55	token?	clay	167	62.5	321.64						b	e
6.II	0	q13	264	085	s91-72	unworked pebble	stone	162.75	64.75	321.9				2.9	5.5	c	na
6.II		q12	261	071	f93-17	human figurine	clay	167.5	68.75	322.37				0.6		b	c
6.II	6.II.1	q12	283	076	s93-313	perforated disc	stone	168	67.5	321.55	4.3	3.5	0.9			d	e
6.II	6.II.1	q12	279	076	o93-113	seal impression	clay	168	68	321.8	2.8	2.3	1.8			b	e
6.II	6.II.1	q12	279	076	o93-138	seal impression	clay	168.05	68.1	321.58	5.3	2.1	2.2			b	e
6.II	6.II.1	q12	279	076	o93-141	seal impression	clay	168.05	68.05	321.83	2.1	1.6	3			b	e
6.II	6.II.1	q12	279	076	o93-142	seal impression	clay	168.05	68	321.72	3.6	2.2	4.3			b	e
6.II	6.II.1	q12	279	076	o93-143	seal impression	clay	168	68.15	321.82	2.5	2.9	4.7			b	e
6.II	6.II.1	q12	279	076	o93-94	seal impression	clay	168	68.1	321.83	3.6	2.5	6.5			b	e
6.II	6.II.1	q12	279	076	o93-95	seal impression	clay	168	68.05	321.72	4.4	2.5				b	e
6.II	6.II.1	q12	279	076	o93-140	spindle whorl	clay	168.35	67.6	321.58	1.6				3.1	c	c
6.II	6.II.1	q12	279	076	p93-68	stand	pottery	167.25	68.25	321.53			1.2	13		c	c
6.II	6.II.2	q13	333	124	s91-174	grinder	stone	168.25	64.25	321.8	8.5				6	c	e
6.II	6.II.3	q13	345	125	j91-44	awl	bone	169	63	321.62	5.5	0.9	0.6			b	e
6.II	6.II.3	q13	327	123	o91-156	spindle whorl	clay	166.9	62	321.49						b	c

BUILDING	ROOM	SQUARE	LOT	LOCUS	SITE FIND No.	CLASS	MATERIAL	EAST (m)	NORTH (m)	HEIGHT (m.a.s.l)	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
6.II	6.II.4	q13	329	126	o91-266	perforated disc	pottery	169.4	60.75	321.37				0.6	3.8	b	e
6.II	6.II.5	q13	325	123	j91-34	awl	bone	167.25	62.75	321.8	8.5	1.4	0.9			b	e
6.II	6.II.6	q13	332	112	f91-10	animal figurine	clay	166.7	65.35	321.85	3.9	1.9		2.5		b	c
6.II	6.II.6	q13	354	112	f91-14	animal figurine	clay	167.25	64	321.53	9	3.5		6.5		b	c
6.II	6.II.6	q13	302	112	j91-22	awl	bone	166.05	64.2	321.85	9.4	0.8	0.4			b	e
6.II	6.II.6	q13	309	112	j91-24	awl	bone	167.5	64.1	321.7	10.6	1.5	1.1			c	e
6.II	6.II.6	q13	313	112	j91-26	awl	bone	165.75	65.15	321.89	8.5	0.9	0.7			c	e
6.II	6.II.6	q13	334	112	j91-30	awl	bone	166.1	65.05	321.78	10.4	1.3	0.9			c	e
6.II	6.II.6	q13	320	112	j91-33	awl	bone	166.65	65.3	321.9	4.8	1.1	0.5			b	e
6.II	6.II.6	q13	332	112	j91-35	awl	bone	166.5	64.2	321.85	6.6	1.4	0.9			b	e
6.II	6.II.6	q13	336	112	j91-36	awl	bone	166.8	65.15	321.68	1.8	0.5	0.3			b	e
6.II	6.II.6	q13	336	112	j91-37	awl	bone	166.3	65.1	321.71	10.5	1.5	1			c	e
6.II	6.II.6	q13	341	112	j91-43	awl	bone	167.05	64.4	321.65	7.1	2.1	0.5			d	e
6.II	6.II.6	q13	317	112	s91-142	axe	stone	167.45	64.9	321.87	4.9	3.4	1.5			b	e
6.II	6.II.6	q13	341	112	b91-25	bead	shell	167.1	63.75	321.65						c	c
6.II	6.II.6	q13	336	112	s91-235	bowl	stone	166.25	64	321.66	4.9	5.5	0.9			b	c
6.II	6.II.6	q13	332	112	s91-262	bowl	stone	166.25	65.25	321.75	3.7	2.6	0.6			b	c
6.II	6.II.6	q13	326	112	p91-198	bowl	pottery	166.55	63.95	321.64						b	c
6.II	6.II.6	q13	356	112	p91-101	bowl	clay	167.7	63.9	321.45						b	c
6.II	6.II.6	q13	305	112	p91-28	goblet	pottery	167.75	63.75	321.71						c	c
6.II	6.II.6	q13	296	112	p91-190	jar	pottery	166.75	64.5	321.8						b	c
6.II	6.II.6	q13	341	112	p91-84	jar	pottery	166.95	65	321.65						b	c
6.II	6.II.6	q13	320	112	f91-15	figurine	clay	165.9	64.75	321.83	4.1				3	b	c
6.II	6.II.6	q13	341	112	f91-18	figurine	clay	167.25	64.6	321.63	3.8	3.2		3.1		b	c
6.II	6.II.6	q13	309	112	f91-4	figurine	clay	167.25	63.9	321.7	6.3	1.7				b	c
6.II	6.II.6	q13	295	112	s91-135	grinder	stone	166	64.25	321.85	17				8.2	c	e
6.II	6.II.6	q13	356	112	s91-308	grinder	stone	166.25	63.8	321.45	24.5				7.6	d	e
6.II	6.II.6	q13	0	112	s91-350	grinder	stone	166.8	64.4	0	11.5	9.4	4.7			b	e

BUILDING	ROOM	SQUARE	LOT	LOCUS	SITE FIND No.	CLASS	MATERIAL	EAST (m)	NORTH (m)	HEIGHT (m.a.s.l)	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
6.II	6.II.6	q13	317	112	s91-137	grinding slab	stone	166.85	64.65	321.87	12	11	4.9			b	c
6.II	6.II.6	q13	317	112	s91-141	grinding slab	stone	167.35	64.9	321.87	16	14.5	1.9			b	c
6.II	6.II.6	q13	326	112	s91-166	grinding slab	stone	166.55	64.9	321.64	9.3	7.6	3.5			b	c
6.II	6.II.6	q13	332	112	s91-171	grinding slab	stone	166.6	64.65	321.92	7.3	5.2	7			b	c
6.II	6.II.6	q13	332	112	s91-173	grinding slab	stone	166.55	64.15	321.82	10.5	8	2.1			b	c
6.II	6.II.6	q13	326	112	s91-296	grinding slab	stone	166.7	64.25	321.7	13.1	10	4.3			b	c
6.II	6.II.6	q13	332	112	s91-297	grinding slab	stone	166.8	65.25	321.87	12.7	14.5	4.6			b	c
6.II	6.II.6	q13	354	112	s91-305	grinding slab	stone	166.9	64.75	321.83		8.4	3.2			b	c
6.II	6.II.6	q13	354	112	s91-306	grinding slab	stone	166.5	63.7	321.72	26	20	2.7			b	c
6.II	6.II.6	q13	302	112	f91-1	human figurine	clay	166.05	64.55	321.86	2.6	1.5		1.4		b	c
6.II	6.II.6	q13	336	112	f91-12	human figurine	clay	166.4	64.3	321.66	2	2.1		4.2		b	c
6.II	6.II.6	q13	341	112	f91-16	human figurine	clay	167.5	63.9	321.62	2.6	2.3		2.7		b	c
6.II	6.II.6	q13	341	112	f91-17	human figurine	clay	167.65	63.9	321.61	3.8	2.8		3.9		b	c
6.II	6.II.6	q13	305	112	f91-2	human figurine	clay	167.25	63.75	321.72	2.6	1.5		1.4		b	c
6.II	6.II.6	q13	309	112	f91-3	human figurine	clay	167.1	64.3	321.78	6.3	1.7		1.8		b	c
6.II	6.II.6	q13	317	112	f91-5	human figurine	clay	166.85	64.5	321.8	2.8	2.4				b	c
6.II	6.II.6	q13	317	112	f91-6	human figurine	clay	166.8	64.45	321.77	3.3	2.3				b	c
6.II	6.II.6	q13	332	112	f91-8	human figurine	clay	166.75	64.8	321.82	2.1	1.6				b	c
6.II	6.II.6	q13	326	112	f91-9	human figurine	clay	167.1	64.5	321.64	3.1	2.1	4.5			b	c
6.II	6.II.6	q13	313	112	o91-102	human figurine	clay	166.8	63.75	321.83	2.4	1.6	1.4			b	c
6.II	6.II.6	q13	334	112	j91-31	incised bone	bone	166.8	65.05	321.75	4	1.4	0.8			b	na
6.II	6.II.6	q13	326	112	o91-160	labret	clay	166.25	64.85	321.67	2			1.3		b	c
6.II	6.II.6	q13	332	112	o91-166	labret	clay	167	65.25	321.82	1.5			1.6		c	c
6.II	6.II.6	q13	332	112	o91-168	labret	clay	166.6	64.5	321.87	1.5			0.9		b	c
6.II	6.II.6	q13	332	112	o91-170	labret	clay	166.5	64	321.89	2.2			0.9		b	c
6.II	6.II.6	q13	341	112	o91-413	labret	clay	166.05	64.45	321.61						b	c
6.II	6.II.6	q13	354	112	o91-414	labret	clay	166.5	65.4	321.7						b	c
6.II	6.II.6	q13	0	112	o91-472	labret	clay	166.8	64.3	0						c	c

BUILDING	ROOM	SQUARE	LOT	LOCUS	SITE FIND No.	CLASS	MATERIAL	EAST (m)	NORTH (m)	HEIGHT (m.a.s.l)	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
6.II	6.II.6	q13	305	112	s91-131	labret	stone	167	64.05	321.79				0.9	1.2	c	c
6.II	6.II.6	q13	341	112	s91-338	labret	stone	167.05	64.7	321.64	1				1.4	c	c
6.II	6.II.6	q13	320	112	o91-146	lid	clay	167.05	64.65	321.96			2.4	12		b	e
6.II	6.II.6	q13	320	112	o91-180	lid	clay	165.8	64.9	321.83			2.3	13.5		d	e
6.II	6.II.6	q13	332	112	o91-181	lid	clay	165.9	65	321.82			2	8.5		d	e
6.II	6.II.6	q13	354	112	o91-369	lid	clay	167	65.35	321.83	5					b	e
6.II	6.II.6	q13	354	112	o91-372	lid	clay	166.5	63.9	321.67						d	e
6.II	6.II.6	q13	356	112	o91-380	lid	clay	165.85	65.1	321.71						b	e
6.II	6.II.6	q13	0	112	o91-470	lid	clay	167.3	64.45	0						b	e
6.II	6.II.6	q13	320	112	o91-490	lid	pottery	166.05	64.3	321.81						c	e
6.II	6.II.6	q13	320	112	o91-490	lid	pottery	166.7	64.6	321.81						c	e
6.II	6.II.6	q13	317	112	o91-130	misc	clay	166.8	64.75	321.8	3.8	1.8	1.1			b	na
6.II	6.II.6	q13	332	112	o91-167	misc	clay	166.5	64.1	321.82	3.2	2.7	1.3			b	na
6.II	6.II.6	q13	336	112	o91-187	misc	clay	166.4	65.05	321.71	3.6	2.3	2.2			b	na
6.II	6.II.6	q13	326	112	o91-197	misc	clay	166.7	64	321.71						b	na
6.II	6.II.6	q13	354	112	o91-417	misc	clay	167.1	65.35	321.67						B	na
6.II	6.II.6	q13	354	112	o91-419	misc	clay	166.55	64.1	321.63						B	na
6.II	6.II.6	q13	354	112	o91-422	misc	clay	166.55	64.55	321.56						B	na
6.II	6.II.6	q13	313	112	o91-459	misc	clay	167.05	64.9	321.72						B	na
6.II	6.II.6	q13	332	112	o91-464	misc	clay	166.7	64.9	321.82						B	na
6.II	6.II.6	q13	309	112	o91-90	misc	clay	167.35	64.1	321.7						B	na
6.II	6.II.6	q13	317	112	s91-136	mortar	stone	167.55	64.5	321.73				4.1	11	c	c
6.II	6.II.6	q13	317	112	s91-140	mortar	stone	167.1	64.75	321.83				4.6	12	c	c
6.II	6.II.6	q13	320	112	o91-263	perforated disc	pottery	166.85	64.2	321.9	2.7	1.5			0.6	b	e
6.II	6.II.6	q13	332	112	o91-267	perforated disc	pottery	167.05	63.95	321.82				0.5	3.6	c	e
6.II	6.II.6	q13	336	112	o91-268	perforated disc	pottery	166.55	64.704	321.68				0.6	4	c	e
6.II	6.II.6	q13	354	112	o91-418	perforated disc	pottery	167	64.35	321.63						c	e
6.II	6.II.6	q13	354	112	o91-420	perforated disc	pottery	167.2	64	321.53						d	e

BUILDING	ROOM	SQUARE	LOT	LOCUS	SITE FIND No.	CLASS	MATERIAL	EAST (m)	NORTH (m)	HEIGHT (m.a.s.l)	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
6.II	6.II.6	q13	354	112	o91-421	perforated disc	pottery	167.5	64.25	321.53						c	e
6.II	6.II.6	q13	302	112	o91-57	perforated disc	pottery	167.1	64.7	321.85						c	e
6.II	6.II.6	q13	300	112	s91-121	perforated disc	stone	167	64.1	321.75				0.8	4.2	c	e
6.II	6.II.6	q13	0	112	s91-351	perforated stone	stone	167.05	64.75	0	13.3				6.7	c	e
6.II	6.II.6	q13	336	112	s91-205	pestle	stone	166	64.5	321.82	40				7.5	c	c
6.II	6.II.6	q13	317	112	s91-139	pounder/grinder	stone	166.25	64.75	321.87	6.4				4.5	c	e
6.II	6.II.6	q13	320	112	s91-188	pounder/grinder	stone	167.25	65.5	321.87	11				6.9	b	e
6.II	6.II.6	q13	326	112	s91-194	pounder/grinder	stone	166.9	64.9	321.8	13.5				6.6	c	e
6.II	6.II.6	q13	356	112	s91-273	pounder/grinder	stone	166.2	63.75	321.45	19.5				7	d	e
6.II	6.II.6	q13	317	112	s91-138	rubber	stone	167.1	64.55	321.84	11	4.6	2.9			d	c
6.II	6.II.6	q13	332	112	s91-172	rubber	stone	166.55	63.75	321.89	9	4	1.8			b	c
6.II	6.II.6	q13	332	112	s91-175	rubber	stone	166	64.75	32.82	10.2	6.1	2.2			b	c
6.II	6.II.6	q13	334	112	s91-263	rubber	stone	166.3	65.25	321.75	4.3	2.6	2.7			b	c
6.II	6.II.6	q13	354	112	s91-307	rubber	stone	167.3	64.15	321.56	9.9	6.3	2.7			b	c
6.II	6.II.6	q13	313	112	o91-104	seal	clay	167	63.9	321.83	4.3	2.5	0.9			b	e
6.II	6.II.6	q13	326	112	o91-148	seal	clay	167.1	65.3	321.67	2.6	2.6	1.6			b	e
6.II	6.II.6	q13	326	112	o91-162	seal	clay	166.5	64.9	321.67	5	4	2.5			b	e
6.II	6.II.6	q13	320	112	o91-198	seal	clay	166.8	63.9	321.81	3.2	2.4	1.5			b	e
6.II	6.II.6	q13	320	112	o91-198	seal	clay	166.6	65.5	321.81						b	e
6.II	6.II.6	q13	332	112	o91-228	seal	clay	166.55	63.9	321.84	4.1	2.6	1.1			b	e
6.II	6.II.6	q13	332	112	o91-229	seal	clay	166.5	65.55	321.91	3.1	2.4	1.4			b	e
6.II	6.II.6	q13	332	112	o91-230	seal	clay	166.55	63.7	321.91	3.1	2.2	0.9			b	e
6.II	6.II.6	q13	332	112	o91-236	seal	clay	166.5	63.8	321.82	3	2.3	1.8			b	e
6.II	6.II.6	q13	332	112	o91-245	seal	clay	166.65	65	321.82	2.5	1.8	0.9			b	e
6.II	6.II.6	q13	320	112	o91-287	seal	clay	167.05	64.85	321.89	3	2.4	1.3			b	e
6.II	6.II.6	q13	320	112	o91-290	seal	clay	166.8	63.8	321.88	3.4	2.6	1.4			b	e
6.II	6.II.6	q13	320	112	o91-293	seal	clay	167.25	65.55	321.87	2.7	2.3	1			b	e
6.II	6.II.6	q13	336	112	o91-298	seal	clay	166.7	64.45	321.65	3.6	2.4	1.2			b	e

BUILDING	ROOM	SQUARE	LOT	LOCUS	SITE FIND No.	CLASS	MATERIAL	EAST (m)	NORTH (m)	HEIGHT (m.a.s.l)	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
6.II	6.II.6	q13	341	112	o91-300	seal	clay	166.9	64.4	321.66	6.3	3.5	1.9			b	e
6.II	6.II.6	q13	354	112	o91-332	seal	clay	166.5	63.85	321.67	4.5	3.3	1.7			b	e
6.II	6.II.6	q13	356	112	o91-342	seal	clay	167.65	64.1	321.53	5.7	5.6	2.2			b	e
6.II	6.II.6	q13	356	112	o91-343	seal	clay	167.7	64	321.45	6	3.5	1.6			b	e
6.II	6.II.6	q13	356	112	o91-348	seal	clay	166.7	63.9	321.47	5.1	3.9	2.8			b	e
6.II	6.II.6	q13	356	112	o91-349	seal	clay	165.9	65.1	321.71	5.1	3.9	1.4			b	e
6.II	6.II.6	q13	332	112	o91-354	seal	clay	167.3	63.95	321.82	3.7,3.	3.5.3.	1.8,1.			b	e
6.II	6.II.6	q13	313	112	o91-456	seal	clay	167.05	65.2	321.72						b	e
6.II	6.II.6	q13	326	112	o91-462	seal	clay	166.5	64.45	321.64						b	e
6.II	6.II.6	q13	334	112	o91-463	seal	clay	166.5	63.6	321.75						b	e
6.II	6.II.6	q13	326	112	o91-465	seal	clay	166.5	64.15	321.64						b	e
6.II	6.II.6	q13	320	112	o91-466	seal	clay	166.7	64.5	321.81						b	e
6.II	6.II.6	q13	320	112	o91-468	seal	clay	166.7	64.35	321.81						b	e
6.II	6.II.6	q13	0	112	o91-469	seal	clay	166.7	64.05	0						b	e
6.II	6.II.6	q13	0	112	o91-474	seal	clay	166.8	64.5	0						b	e
6.II	6.II.6	q13	0	112	o91-475	seal	clay	167.05	65.05	0						b	e
6.II	6.II.6	q13	0	112	o91-479	seal	clay	167.3	65.6	0						b	e
6.II	6.II.6	q13	0	112	o91-486	seal	clay	166.85	65.1	0						b	e
6.II	6.II.6	q13	0	112	o91-487	seal	clay	167	63.6	0						b	e
6.II	6.II.6	q13	309	112	o91-80	seal	clay	167.3	64.35	321.79						b	e
6.II	6.II.6	q13	313	112	o91-98	seal	clay	166.25	65.4	321.83						b	e
6.II	6.II.6	q13	313	112	o91-105	seal impression	clay	166.6	64.4	321.73	3.3	1.8	1.1			b	e
6.II	6.II.6	q13	313	112	o91-106	seal impression	clay	166.5	64.65	321.79	3.6	2.8	1.2			b	e
6.II	6.II.6	q13	313	112	o91-107	seal impression	clay	167.05	65.25	321.79	6.1	4.7	4.1			b	e
6.II	6.II.6	q13	313	112	o91-108	seal impression	clay	167.1	63.8	321.83	4	3.5	0.9			b	e
6.II	6.II.6	q13	317	112	o91-110	seal impression	clay	167.35	64.4	321.83	2.2	2	0.7			b	e
6.II	6.II.6	q13	317	112	o91-115	seal impression	clay	167.25	64.35	321.71	10.5	3.2	1.5			c	e
6.II	6.II.6	q13	317	112	o91-118	seal impression	clay	167	64.65	321.71						b	e

BUILDING	ROOM	SQUARE	LOT	LOCUS	SITE FIND No.	CLASS	MATERIAL	EAST (m)	NORTH (m)	HEIGHT (m.a.s.l)	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
6.II	6.II.6	q13	317	112	o91-121	seal impression	clay	167.2	64.6	321.73	4.8	4	3.7			b	e
6.II	6.II.6	q13	317	112	o91-122	seal impression	clay	167.05	64.1	321.77	3.5	2.1	1			b	e
6.II	6.II.6	q13	317	112	o91-129	seal impression	clay	166.5	64.95	321.8	4.2	2.7	1.4			b	e
6.II	6.II.6	q13	317	112	o91-132	seal impression	clay	167.3	64.55	321.7	4.5	2.1	0.9			b	e
6.II	6.II.6	q13	320	112	o91-199	seal impression	clay	167.05	63.85	321.83	2	2	1.1			b	e
6.II	6.II.6	q13	320	112	o91-200	seal impression	clay	165.75	64.75	321.83	3.2	2.8	1.3			b	e
6.II	6.II.6	q13	320	112	o91-201	seal impression	clay	166	65.2	321.89	6.2	3.8	1.4			b	e
6.II	6.II.6	q13	320	112	o91-202	seal impression	clay	166.25	65.45	321.89	5.4	2.9	3			b	e
6.II	6.II.6	q13	320	112	o91-203	seal impression	clay	165.9	65.25	321.89	4.6	2.6	3.4			b	e
6.II	6.II.6	q13	320	112	o91-204	seal impression	clay	166.65	65.05	321.85	5.9	3.4	1			b	e
6.II	6.II.6	q13	320	112	o91-205	seal impression	clay	167.05	65.1	321.89	3.4	2	0.8			b	e
6.II	6.II.6	q13	320	112	o91-206	seal impression	clay	166.7	65	321.89	2.9	2.8	0.9			b	e
6.II	6.II.6	q13	320	112	o91-207	seal impression	clay	166.75	65.5	321.88	6.7	6.1	3.3			b	e
6.II	6.II.6	q13	326	112	o91-208	seal impression	clay	167.4	63.85	321.64	8.3	4.8	1.3			b	e
6.II	6.II.6	q13	326	112	o91-209	seal impression	clay	167	63.8	321.64	2.9	1.7	1			b	e
6.II	6.II.6	q13	326	112	o91-210	seal impression	clay	167.1	64.65	321.56	4.4	3	1.3			b	e
6.II	6.II.6	q13	326	112	o91-212	seal impression	clay	166.9	64.6	321.69	2.7	2.7	1			b	e
6.II	6.II.6	q13	326	112	o91-213	seal impression	clay	167.05	64.6	321.68	4.1	3.7	1.3			b	e
6.II	6.II.6	q13	326	112	o91-214	seal impression	clay	166.6	64.75	321.64	1.7	1.6	0.8			b	e
6.II	6.II.6	q13	326	112	o91-215	seal impression	clay	166.7	64.2	321.64	2.3	1.8	1			b	e
6.II	6.II.6	q13	326	112	o91-216	seal impression	clay	167.2	64.75	321.74	3.2	2.1	1.2			b	e
6.II	6.II.6	q13	326	112	o91-217	seal impression	clay	167.25	65	321.7	3.7	2.3	1.3			b	e
6.II	6.II.6	q13	326	112	o91-218	seal impression	clay	166.55	64.8	321.67	5.6	4.7	1.8			b	e
6.II	6.II.6	q13	326	112	o91-219	seal impression	clay	166.65	64.25	321.7	2.6	2.4	1			b	e
6.II	6.II.6	q13	326	112	o91-220	seal impression	clay	166.55	64.75	321.72	6.1	5.7	2.7			b	e
6.II	6.II.6	q13	326	112	o91-221	seal impression	clay	166.2	64.65	321.67	8.2	7.7	2.1			b	e
6.II	6.II.6	q13	326	112	o91-222	seal impression	clay	167.2	65.1	321.67	3.6	2.8	1			b	e
6.II	6.II.6	q13	326	112	o91-223	seal impression	clay	167.1	65.05	321.69	4.5	3.2	1.6			b	e

BUILDING	ROOM	SQUARE	LOT	LOCUS	SITE FIND No.	CLASS	MATERIAL	EAST (m)	NORTH (m)	HEIGHT (m.a.s.l)	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
6.II	6.II.6	q13	326	112	o91-224	seal impression	clay	167.1	65.25	321.67	2.7	2.2	1.3			b	e
6.II	6.II.6	q13	332	112	o91-225	seal impression	clay	167.25	65.25	321.82	3.4	3	1.5			b	e
6.II	6.II.6	q13	332	112	o91-226	seal impression	clay	166.5	65.3	321.86	3.2	2.5	1			b	e
6.II	6.II.6	q13	332	112	o91-227	seal impression	clay	166.85	65.55	321.84	5	3.3	1			b	e
6.II	6.II.6	q13	332	112	o91-232	seal impression	clay	166.4	65.4	321.92	14	8.5	2.6			b	e
6.II	6.II.6	q13	332	112	o91-234	seal impression	clay	166.45	64.65	321.77	2.9	2.2	1			b	e
6.II	6.II.6	q13	332	112	o91-235	seal impression	clay	165.65	64.75	321.88	5.9	5.4	2.7			b	e
6.II	6.II.6	q13	332	112	o91-237	seal impression	clay	166.5	65.35	321.77	3.6	3.5	1.8			b	e
6.II	6.II.6	q13	332	112	o91-238	seal impression	clay	166.15	65.25	321.89	4.2	3.2	0.8			b	e
6.II	6.II.6	q13	332	112	o91-239	seal impression	clay	166.55	63.85	321.82	2.6	2.4	1			b	e
6.II	6.II.6	q13	332	112	o91-240	seal impression	clay	166.5	65	321.82	5.8	4.8	1.6			b	e
6.II	6.II.6	q13	334	112	o91-242	seal impression	clay	165.85	64.85	321.8	4.1	3.3	1.8			b	e
6.II	6.II.6	q13	334	112	o91-243	seal impression	clay	166.7	63.85	321.8	4.1	4.1	1.8			b	e
6.II	6.II.6	q13	336	112	o91-244	seal impression	clay	165.75	65.1	321.78	7.6	6.5	2.7			b	e
6.II	6.II.6	q13	336	112	o91-246	seal impression	clay	166.4	63.6	321.65	5.8	3.2	1.8			b	e
6.II	6.II.6	q13	336	112	o91-248	seal impression	clay	166.6	64.25	321.67	3.3	2.5	1.1			b	e
6.II	6.II.6	q13	336	112	o91-249	seal impression	clay	166.53	64.4	321.72	3.6	2.5	1.1			b	e
6.II	6.II.6	q13	336	112	o91-250	seal impression	clay	166.3	64.6	321.74	9.7	6	2.4			b	e
6.II	6.II.6	q13	336	112	o91-251	seal impression	clay	166.1	64.6	321.73	2.2	1.5	0.7			b	e
6.II	6.II.6	q13	336	112	o91-252	seal impression	clay	167.35	64.05	321.68	2.8	2	1.1			b	e
6.II	6.II.6	q13	336	112	o91-253	seal impression	clay	166.7	64.75	321.63	3.2	2.7	1.7			b	e
6.II	6.II.6	q13	336	112	o91-254	seal impression	clay	166.25	64.65	321.75	3.9	3	1.5			b	e
6.II	6.II.6	q13	336	112	o91-255	seal impression	clay	166.5	65.05	321.71	4.6	3.8	2			b	e
6.II	6.II.6	q13	336	112	o91-256	seal impression	clay	166.05	65	321.7	4.6	3.6	1.5			b	e
6.II	6.II.6	q13	336	112	o91-257	seal impression	clay	166.9	63.65	321.64	4.3	2.3	1.5			b	e
6.II	6.II.6	q13	336	112	o91-258	seal impression	clay	167	64	321.64	4	2.9	1.7			b	e
6.II	6.II.6	q13	336	112	o91-259	seal impression	clay	167.15	64.4	321.7	3.9	2.7	1.7			b	e
6.II	6.II.6	q13	336	112	o91-260	seal impression	clay	167.25	63.7	321.63	3.8	3.1	1.5			b	e

BUILDING	ROOM	SQUARE	LOT	LOCUS	SITE FIND No.	CLASS	MATERIAL	EAST (m)	NORTH (m)	HEIGHT (m.a.s.l)	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
6.II	6.II.6	q13	320	112	o91-283	seal impression	clay	165.8	65.25	321.89	3.2	2.2	1.2			b	e
6.II	6.II.6	q13	320	112	o91-284	seal impression	clay	166.1	65.35	321.89	7.7	5.2	4.6			b	e
6.II	6.II.6	q13	320	112	o91-285	seal impression	clay	166.05	65.65	321.89	9.2	6.8	2.3			b	e
6.II	6.II.6	q13	320	112	o91-286	seal impression	clay	166.5	65.25	321.89	5.4	4.5	1.7			b	e
6.II	6.II.6	q13	320	112	o91-288	seal impression	clay	166.8	64.1	321.9	6.1	3.5	2.4			b	e
6.II	6.II.6	q13	320	112	o91-289	seal impression	clay	166.85	64	321.85	2.8	1.8	1.3			b	e
6.II	6.II.6	q13	320	112	o91-291	seal impression	clay	167	65.3	321.88	6	4.3	3.2			b	e
6.II	6.II.6	q13	320	112	o91-292	seal impression	clay	166.85	65.5	321.88	7.2	4.7	3			b	e
6.II	6.II.6	q13	320	112	o91-294	seal impression	clay	167	65.6	321.88	4.6	2.7	1.3			b	e
6.II	6.II.6	q13	332	112	o91-295	seal impression	clay	166.6	65.25	321.87	3.5	3.3	1			b	e
6.II	6.II.6	q13	336	112	o91-296	seal impression	clay	166.25	63.75	321.66	3.3	2.6	1.2			b	e
6.II	6.II.6	q13	336	112	o91-297	seal impression	clay	166.5	64.4	321.68	2.9	1.8	0.9			b	e
6.II	6.II.6	q13	341	112	o91-299	seal impression	clay	167.4	63.75	321.63	4.6	3.1	1.7			b	e
6.II	6.II.6	q13	341	112	o91-301	seal impression	clay	166.8	64.55	32.66	5.4	3.5	2			b	e
6.II	6.II.6	q13	341	112	o91-302	seal impression	clay	167.35	63.9	321.62	4.3	3.6	1.5			b	e
6.II	6.II.6	q13	341	112	o91-303	seal impression	clay	167.3	63.8	321.63	3.6	3.3	1.3			b	e
6.II	6.II.6	q13	341	112	o91-304	seal impression	clay	167.15	64.45	321.65	3.3	3.1	1.3			b	e
6.II	6.II.6	q13	341	112	o91-305	seal impression	clay	166.8	65.2	321.62	3.6	3.2	1.4			b	e
6.II	6.II.6	q13	341	112	o91-306	seal impression	clay	167.3	64.1	321.62	2.5	1.9	1.1			b	e
6.II	6.II.6	q13	341	112	o91-307	seal impression	clay	167.3	63.9	321.64	5.8	5.3	2.5			b	e
6.II	6.II.6	q13	341	112	o91-308	seal impression	clay	166.7	64.95	321.65	3.8	2.2	1.1			b	e
6.II	6.II.6	q13	341	112	o91-309	seal impression	clay	166.8	63.85	321.65	3.4	1.8	1.3			b	e
6.II	6.II.6	q13	341	112	o91-310	seal impression	clay	166.8	64.8	321.61	4.7	3.8	2			b	e
6.II	6.II.6	q13	341	112	o91-314	seal impression	clay	166.6	64.9	321.67	4.7	3.9	2			b	e
6.II	6.II.6	q13	341	112	o91-315	seal impression	clay	166.45	64.85	321.64	3.8	3.3	1.8			b	e
6.II	6.II.6	q13	341	112	o91-316	seal impression	clay	167.3	64.85	321.64	9.2	7.3	3.9			b	e
6.II	6.II.6	q13	341	112	o91-317	seal impression	clay	166.55	64.3	321.65	4.2	4	1.8			b	e
6.II	6.II.6	q13	341	112	o91-318	seal impression	clay	166.7	64.8	321.78	2.6	1.9	0.8			b	e

BUILDING	ROOM	SQUARE	LOT	LOCUS	SITE FIND No.	CLASS	MATERIAL	EAST (m)	NORTH (m)	HEIGHT (m.a.s.l)	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
6.II	6.II.6	q13	341	112	o91-319	seal impression	clay	167	64.8	321.64	4.5					b	e
6.II	6.II.6	q13	341	112	o91-320	seal impression	clay	166.55	64.5	321.63	5					b	e
6.II	6.II.6	q13	341	112	o91-321	seal impression	clay	166.65	65.1	321.66	8.4					b	e
6.II	6.II.6	q13	341	112	o91-322	seal impression	clay	166.75	65.1	321.67	4					b	e
6.II	6.II.6	q13	341	112	o91-323	seal impression	clay	166.8	65.1	321.66	4.5	3.5	2			b	e
6.II	6.II.6	q13	354	112	o91-325	seal impression	clay	166.65	65.25	321.66	3.8	2.7	1.2			b	e
6.II	6.II.6	q13	354	112	o91-326	seal impression	clay	166.9	65.5	321.51	4.2	3.8	2.1			b	e
6.II	6.II.6	q13	354	112	o91-329	seal impression	clay	166.7	65.45	321.68	10.2	8.7	2.3			b	e
6.II	6.II.6	q13	354	112	o91-330	seal impression	clay	166.2	65.35	321.74	3.4	3.3	1.6			b	e
6.II	6.II.6	q13	354	112	o91-331	seal impression	clay	167.05	65.6	321.87	3.6	3.1	0.5			b	e
6.II	6.II.6	q13	354	112	o91-333	seal impression	clay	166.55	64.25	321.87	5.1	3.5	1.9			b	e
6.II	6.II.6	q13	354	112	o91-334	seal impression	clay	167.15	65.7	321.87	6.7	2.4	2.4			b	e
6.II	6.II.6	q13	354	112	o91-335	seal impression	clay	166.8	64.2	321.63	5.1	4.4	2.2			b	e
6.II	6.II.6	q13	354	112	o91-336	seal impression	clay	166.4	64	321.61	3.8	2.8	1.4			b	e
6.II	6.II.6	q13	354	112	o91-337	seal impression	clay	166.55	64	321.51	3.9	3.6	1.9			b	e
6.II	6.II.6	q13	354	112	o91-338	seal impression	clay	167.6	64.4	321.56	4.7	3.3	1.7			b	e
6.II	6.II.6	q13	356	112	o91-339	seal impression	clay	167.25	64.4	321.48	4	1.9	0.8			b	e
6.II	6.II.6	q13	356	112	o91-340	seal impression	clay	167.3	64.05	321.54	3.6	2.4	1.1			b	e
6.II	6.II.6	q13	356	112	o91-341	seal impression	clay	167.5	64	321.53	3.5	2	1.1			b	e
6.II	6.II.6	q13	356	112	o91-344	seal impression	clay	167.65	64.4	321.45	9.2	7.9	4			b	e
6.II	6.II.6	q13	356	112	o91-345	seal impression	clay	167.4	63.8	321.47	6.9	5	2			b	e
6.II	6.II.6	q13	356	112	o91-346	seal impression	clay	167.45	64.1	321.47	4.6	2.8	1.4			b	e
6.II	6.II.6	q13	356	112	o91-347	seal impression	clay	166.7	64.15	321.47	4	3	1.5			b	e
6.II	6.II.6	q13	356	112	o91-350	seal impression	clay	165.85	65	321.45						b	e
6.II	6.II.6	q13	356	112	o91-351	seal impression	clay	165.8	65.3	321.45						b	e
6.II	6.II.6	q13	356	112	o91-352	seal impression	clay	166.7	63.95	321.45						b	e
6.II	6.II.6	q13	326	112	o91-355	seal impression	clay	166.55	64.05	321.64	4					b	e
6.II	6.II.6	q13	320	112	o91-357	seal impression	clay	167.05	64.95	321.89	9.9					b	e

BUILDING	ROOM	SQUARE	LOT	LOCUS	SITE FIND No.	CLASS	MATERIAL	EAST (m)	NORTH (m)	HEIGHT (m.a.s.l)	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
6.II	6.II.6	q13	354	112	o91-370	seal impression	clay	166.4	65.3	321.72	1.1					b	e
6.II	6.II.6	q13	354	112	o91-371	seal impression	clay	166.5	63.65	321.84	11.8	6.8	2.4			b	e
6.II	6.II.6	q13	354	112	o91-373	seal impression	clay	166.5	63.95	321.67	6.7					b	e
6.II	6.II.6	q13	354	112	o91-415	seal impression	clay	166.8	64.35	321.72						b	e
6.II	6.II.6	q13	320	112	o91-467	seal impression	clay	166.7	64.4	321.81						b	e
6.II	6.II.6	q13	0	112	o91-471	seal impression	clay	166.05	64.05	0						b	e
6.II	6.II.6	q13	0	112	o91-473	seal impression	clay	167.05	64.15	0						b	e
6.II	6.II.6	q13	0	112	o91-476	seal impression	clay	166.8	64.6	0						b	e
6.II	6.II.6	q13	0	112	o91-477	seal impression	clay	167.05	64.25	0						b	e
6.II	6.II.6	q13	0	112	o91-478	seal impression	clay	166.8	64.7	0						b	e
6.II	6.II.6	q13	0	112	o91-484	seal impression	clay	166.8	65	0						b	e
6.II	6.II.6	q13	0	112	o91-485	seal impression	clay	167.05	64.45	0						b	e
6.II	6.II.6	q13	0	112	o91-488	seal impression	clay	165.8	64.5	0						b	e
6.II	6.II.6	q13	302	112	o91-64	seal impression	clay	167	64.85	321.85						b	e
6.II	6.II.6	q13	302	112	o91-66	seal impression	clay	167	64.6	321.85						b	e
6.II	6.II.6	q13	305	112	o91-67	seal impression	clay	166	65.3	321.94						b	e
6.II	6.II.6	q13	305	112	o91-70	seal impression	clay	167.8	64.15	321.81						b	e
6.II	6.II.6	q13	309	112	o91-81	seal impression	clay	167	64.25	321.79						b	e
6.II	6.II.6	q13	309	112	o91-85	seal impression	clay	167.05	63.5	321.69						b	e
6.II	6.II.6	q13	309	112	o91-86	seal impression	clay	167.3	64.2	321.69						b	e
6.II	6.II.6	q13	309	112	o91-89	seal impression	clay	167.25	64.05	321.7						b	e
6.II	6.II.6	q13	309	112	o91-92	seal impression	clay	167.05	64	321.76						b	e
6.II	6.II.6	q13	309	112	o91-93	seal impression	clay	166.95	64.1	321.7						b	e
6.II	6.II.6	q13	313	112	o91-95	seal impression	clay	167.5	64.6	321.88						b	e
6.II	6.II.6	q13	313	112	o91-96	seal impression	clay	166.1	65	321.86						b	e
6.II	6.II.6	q13	313	112	o91-99	seal impression	clay	166.25	64.8	321.83						b	e
6.II	6.II.6	q13	354	112	p91-136	bowl	pottery	166.65	65.4	321.7						c	e
6.II	6.II.6	q13	317	112	o91-111	slingmissile	clay	167.75	64	321.7	4.7			3.3		c	e

BUILDING	ROOM	SQUARE	LOT	LOCUS	SITE FIND No.	CLASS	MATERIAL	EAST (m)	NORTH (m)	HEIGHT (m.a.s.l)	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
6.II	6.II.6	q13	317	112	o91-120	slingmissile	clay	167.05	64.2	321.77	4.8			2.8		c	e
6.II	6.II.6	q13	317	112	o91-127	slingmissile	clay	166.3	64.75	321.77	4.5			2.8		c	e
6.II	6.II.6	q13	317	112	o91-135	slingmissile	clay	167.5	64.75	321.7	4.8			2.8		c	e
6.II	6.II.6	q13	326	112	o91-150	slingmissile	clay	166.05	64.4	321.64	3.8			3.1		b	e
6.II	6.II.6	q13	332	112	o91-165	slingmissile	clay	166.5	64.05	321.82	4.5			2.8		c	e
6.II	6.II.6	q13	332	112	o91-169	slingmissile	clay	166.6	64.55	321.92	4.7			3.2		b	e
6.II	6.II.6	q13	334	112	o91-184	slingmissile	clay	165.75	65	321.87	3.7			2.8		b	e
6.II	6.II.6	q13	354	112	o91-276	slingmissile	clay	167.1	65.65	321.56	4				3	b	e
6.II	6.II.6	q13	320	112	o91-358	slingmissile	clay	166.5	65.45	321.9	4.6					c	e
6.II	6.II.6	q13	320	112	o91-360	slingmissile	clay	166.05	64.35	321.88	4					c	e
6.II	6.II.6	q13	341	112	o91-366	slingmissile	clay	166.95	64.6	321.65	5.1				3.4	c	e
6.II	6.II.6	q13	354	112	o91-367	slingmissile	clay	166.85	63.75	321.68	5					c	e
6.II	6.II.6	q13	354	112	o91-378	slingmissile	clay	167.15	64.15	321.51						c	e
6.II	6.II.6	q13	354	112	o91-378	slingmissile	clay	167.15	64.1	321.51						c	e
6.II	6.II.6	q13	341	112	o91-411	slingmissile	clay	167.35	64.45	321.64						b	e
6.II	6.II.6	q13	300	112	o91-54	slingmissile	clay	166.5	64.75	321.92						c	e
6.II	6.II.6	q13	313	112	o91-94	slingmissile	clay	167.4	65	321.88						d	e
6.II	6.II.6	q13	313	112	j91-27	spatula	bone	166.5	64.5	321.73	9	2.2	0.3			b	e
6.II	6.II.6	q13	313	112	o91-101	spindle whorl	clay	167	63.65	321.82			2.2	2.9		c	c
6.II	6.II.6	q13	313	112	o91-103	spindle whorl	clay	166.1	64.25	321.72			2.8	3.4		c	c
6.II	6.II.6	q13	317	112	o91-109	spindle whorl	clay	167.05	64.8	321.7			1.2	3.2		c	c
6.II	6.II.6	q13	317	112	o91-119	spindle whorl	clay	167.25	64.55	321.73			2.4	3.2		c	c
6.II	6.II.6	q13	317	112	o91-126	spindle whorl	clay	166.85	65.25	321.77			2.1	2.9		b	c
6.II	6.II.6	q13	317	112	o91-134	spindle whorl	clay	167.5	64.65	321.77			2.5	2.9		b	c
6.II	6.II.6	q13	326	112	o91-145	spindle whorl	clay	166.95	64.15	321.64			2	3.2		b	c
6.II	6.II.6	q13	326	112	o91-161	spindle whorl	clay	166.7	64.65	321.67			1.9	2.7		b	c
6.II	6.II.6	q13	332	112	o91-182	spindle whorl	clay	166.5	64.3	321.89			2.6	2.7		b	c
6.II	6.II.6	q13	334	112	o91-185	spindle whorl	clay	166.8	64.65	321.87			1.6	2.3		b	c

BUILDING	ROOM	SQUARE	LOT	LOCUS	SITE FIND No.	CLASS	MATERIAL	EAST (m)	NORTH (m)	HEIGHT (m.a.s.l)	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
6.II	6.II.6	q13	320	112	o91-264	spindle whorl	clay	167.1	65.6	321.87				2.3	3.5	c	c
6.II	6.II.6	q13	326	112	o91-265	spindle whorl	clay	167.6	64	321.64				2.1	2.9	c	c
6.II	6.II.6	q13	336	112	o91-269	spindle whorl	clay	166.8	64.85	321.7				1.4	2.1	c	c
6.II	6.II.6	q13	341	112	o91-365	spindle whorl	clay	167	64.3	321.64				1.8	2.7	d	c
6.II	6.II.6	q13	295	112	o91-50	spindle whorl	clay	166.75	64.55	321.96						c	c
6.II	6.II.6	q13	309	112	o91-83	spindle whorl	clay	167	64.55	321.76						d	c
6.II	6.II.6	q13	309	112	o91-84	spindle whorl	clay	167.3	64.25	321.76						b	c
6.II	6.II.6	q13	341	112	s91-337	spindle whorl	stone	166.85	64.9	321.79				1	2.7	c	c
6.II	6.II.6	q13	354	112	s91-342	spindle whorl	stone	166.5	64.25	321.57				0.8	3	c	c
6.II	6.II.6	q13	341	112	o91-178	pot stand?	clay	167.1	65.55	321.65			9	13		c	c
6.II	6.II.6	q13	317	112	o91-136	stopper	clay	166.8	63.95	321.7	8			3.6		d	e
6.II	6.II.6	q13	320	112	o91-147	stopper	clay	167.3	65.25	321.96			6	11		d	e
6.II	6.II.6	q13	336	112	o91-174	stopper	clay	166.25	64.9	321.68			3.5	8.6		c	e
6.II	6.II.6	q13	354	112	o91-374	stopper	clay	167.1	65.4	321.89						b	e
6.II	6.II.6	q13	354	112	o91-376	stopper	clay	167.25	65.6	321.74						b	e
6.II	6.II.6	q13	354	112	o91-379	stopper	clay	167.25	64.3	321.56						b	e
6.II	6.II.6	q13	309	112	o91-87	stopper	clay	167.3	64	321.74						c	e
6.II	6.II.6	q13	309	112	o91-91	stopper	clay	166	63.65	321.66						d	e
6.II	6.II.6	q13	313	112	o91-100	token	clay	167.35	63.85	321.82				1.6		c	e
6.II	6.II.6	q13	317	112	o91-113	token	clay	167.1	64.6	321.73				2.2		c	e
6.II	6.II.6	q13	317	112	o91-114	token	clay	167.05	64.5	321.73				2.7		c	e
6.II	6.II.6	q13	317	112	o91-123	token	clay	167.1	64	321.77	1.9			1.1		c	e
6.II	6.II.6	q13	317	112	o91-124	token	clay	167.05	63.9	321.77	2.1			1.4		b	e
6.II	6.II.6	q13	317	112	o91-125	token	clay	167.05	63.8	321.77				1.6		c	e
6.II	6.II.6	q13	317	112	o91-128	token	clay	166.8	64.95	321.77				2.2		c	e
6.II	6.II.6	q13	317	112	o91-131	token	clay	166.85	64.55	321.77				1.5		c	e
6.II	6.II.6	q13	317	112	o91-133	token	clay	166.85	64.25	321.77				2.6		c	e
6.II	6.II.6	q13	326	112	o91-149	token	clay	166.55	64.95	321.68	4.4			2		b	e

BUILDING	ROOM	SQUARE	LOT	LOCUS	SITE FIND No.	CLASS	MATERIAL	EAST (m)	NORTH (m)	HEIGHT (m.a.s.l)	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
6.II	6.II.6	q13	326	112	o91-151	token	clay	166.55	64.85	321.67				2.5		c	e
6.II	6.II.6	q13	326	112	o91-153	token	clay	166.7	63.8	321.74			2.7	3.1		c	e
6.II	6.II.6	q13	326	112	o91-154	token	clay	166.7	64.3	321.8				1.9		c	e
6.II	6.II.6	q13	326	112	o91-155	token	clay	166.55	65	321.64				2.9		c	e
6.II	6.II.6	q13	326	112	o91-155	token	clay	166.7	64.1	321.64						c	e
6.II	6.II.6	q13	326	112	o91-159	token	clay	166.7	64.85	321.72				2.1		c	e
6.II	6.II.6	q13	320	112	o91-356	token	clay	167.05	65.15	321.83	3					b	e
6.II	6.II.6	q13	320	112	o91-359	token	clay	166.8	65.7	321.85					2.8,2.	c	e
6.II	6.II.6	q13	320	112	o91-361	token	clay	166.7	64.55	321.81	4.2					d	e
6.II	6.II.6	q13	354	112	o91-377	token	clay	167.05	63.75	321.51						b	e
6.II	6.II.6	q13	356	112	o91-381	token	clay	167.65	64.3	321.61						c	e
6.II	6.II.6	q13	356	112	o91-382	token	clay	167.7	64.05	321.47						b	e
6.II	6.II.6	q13	341	112	o91-412	token	clay	167.75	63.9	321.61						c	e
6.II	6.II.6	q13	354	112	o91-416	token	clay	166.55	63.8	321.68						c	e
6.II	6.II.6	q13	0	112	o91-482	token	clay	166.8	64.9	0						c	e
6.II	6.II.6	q13	0	112	o91-483	token	clay	167.1	65.1	0						b	e
6.II	6.II.6	q13	0	112	o91-489	token	clay	167.05	64.55	0						c	e
6.II	6.II.6	q13	295	112	o91-51	token	clay	166.8	64.25	321.82						c	e
6.II	6.II.6	q13	302	112	o91-56	token	clay	166.05	64.25	321.84						c	e
6.II	6.II.6	q13	305	112	o91-60	token	clay	166.05	64.15	321.71						b	e
6.II	6.II.6	q13	305	112	o91-62	token	clay	166.05	64.1	321.71						c	e
6.II	6.II.6	q13	305	112	o91-69	token	clay	166.8	64	321.71						c	e
6.II	6.II.6	q13	309	112	o91-75	token	clay	166.05	64	321.79						c	e
6.II	6.II.6	q13	309	112	o91-79	token	clay	166.55	64.6	321.77						c	e
6.II	6.II.6	q13	309	112	o91-82	token	clay	167.3	64.3	321.77						c	e
6.II	6.II.6	q13	309	112	o91-88	token	clay	167.35	64.15	321.7						c	e
6.II	6.II.6	q13	313	112	o91-97	token	clay	167.35	64	321.83						b	e
6.II	6.II.6	q13	998	112	o91-461	token group (28)	clay	167.05	64.05	321.45						c	e

BUILDING	ROOM	SQUARE	LOT	LOCUS	SITE FIND No.	CLASS	MATERIAL	EAST (m)	NORTH (m)	HEIGHT (m.a.s.l)	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
6.II	6.II.6	q13	332	112	o91-183	token?	clay	166.7	64.7	321.82			1.6	1.6		c	e
6.II	6.II.6	q13	354	112	o91-375	token?	clay	166.55	64.2	321.89						b	e
6.II	6.II.6	q13	0	112	o91-480	token?	clay	166.5	65.5	0						b	e
6.II	6.II.6	q13	0	112	o91-481	token?	clay	167.05	64.35	0						c	e
6.II	6.II.6	q13	341	112	s91-271	unworked pebble	stone	167.4	64.95	321.63				3.8	11	c	na
6.II	6.II.7	q12	267	077	s93-255	grinder	stone	166	67.75	321.99	20				8.5	b	e
6.II	6.II.7	q13	338	119	s91-180	grinding slab	stone	165.25	67	321.74	10	9.5	4.8			b	c
6.II	6.II.7	q12	275	077	s93-308	grinding slab	stone	166.25	68		16	13	3.8			b	c
6.II	6.II.7	q12	275	077	o93-125	labret	clay	165.3	67.5	321.55	3.9				2.1	c	c
6.II	6.II.7	q12	275	077	o93-129	labret?	clay	166.05	68.25	321.79	1.9	1.1			0.9	b	c
6.II	6.II.7	q12	275	077	o93-127	lid	clay	165.45	67.6	321.55				2.5	9	b	e
6.II	6.II.7	q12	275	077	o93-157	lid	clay	165.95	68.15	321.76	4.3	2.7	1.5			b	e
6.II	6.II.7	q12	280	077	o93-107	misc	clay	166.3	68.15	321.7	2	1.3	2.2			b	na
6.II	6.II.7	q12	280	077	o93-108	misc	clay	166.3	68.2	321.7	2.5	1	2.3			b	na
6.II	6.II.7	q12	280	077	o93-111	misc	clay	165.9	68.15	321.8	2.8	2.2	1.1			b	na
6.II	6.II.7	q12	275	077	o93-122	misc	clay	166.05	67.75	321.62						b	na
6.II	6.II.7	q12	275	077	o93-133	misc	clay	166	68.1	321.76	3.8	3	1.1			b	na
6.II	6.II.7	q12	275	077	o93-134	misc	clay	166	68.15	321.69	2.5	1	0.7			b	na
6.II	6.II.7	q12	275	077	o93-137	misc	clay	166.1	68.1	321.76	1.9	1.6	0.4			b	na
6.II	6.II.7	q12	275	077	o93-152	misc	clay	166.4	67.7	321.79	4.6	3.2	1			b	na
6.II	6.II.7	q12	275	077	o93-153	misc	clay	166.1	68	321.83	3.4	2.2	0.5			b	na
6.II	6.II.7	q12	275	077	o93-160	misc	clay	166.1	68.15	321.7	3.1	2.2	1.7			b	na
6.II	6.II.7	q12	275	077	o93-162	misc	clay	166.25	68.1						1.5	b	na
6.II	6.II.7	q13	338	119	s91-298	mortar	stone	166.7	63.75	321.79				9.3	19	c	c
6.II	6.II.7	q12	275	077	j93-22	misc	bone	166.15	68.1				0.7	0.6		d	e
6.II	6.II.7	q12	280	077	o93-101	seal	clay	166.2	68.2	321.7	2.4	1.8	1.3			b	e
6.II	6.II.7	q12	280	077	o93-103	seal	clay	166.25	68.15	321.77	2.7	2	0.6			b	e
6.II	6.II.7	q12	280	077	o93-145	seal	clay	165.95	68.25	321.7	1.9	1.7	0.8			b	e

BUILDING	ROOM	SQUARE	LOT	LOCUS	SITE FIND No.	CLASS	MATERIAL	EAST (m)	NORTH (m)	HEIGHT (m.a.s.l)	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
6.II	6.II.7	q12	275	077	o93-161	seal	clay	166.1	68.2	321.88	3.3	2.8	1.3			b	e
6.II	6.II.7	q12	280	077	o93-97	seal	clay	165.9	68.25	321.7	1.8	1.7	1.3			b	e
6.II	6.II.7	q12	280	077	o93-100	seal impression	clay	166.2	68.15	321.7	2.8	0.8	1.1			b	e
6.II	6.II.7	q12	280	077	o93-102	seal impression	clay	166.2	68.25	321.7	3	2.3	1.2			b	e
6.II	6.II.7	q12	280	077	o93-104	seal impression	clay	166.25	68.2	321.7	3.7	1.7	1			b	e
6.II	6.II.7	q12	280	077	o93-106	seal impression	clay	166.3	68.1	321.73	2.5	1.3	1.7			b	e
6.II	6.II.7	q12	280	077	o93-110	seal impression	clay	165.9	68.1	321.7	1.8	1.3	0.8			b	e
6.II	6.II.7	q12	275	077	o93-120	seal impression	clay	165.9	67.5	321.62	1.8	0.9	2.1			b	e
6.II	6.II.7	q12	275	077	o93-121	seal impression	clay	165.6	67.5	321.62						b	e
6.II	6.II.7	q12	275	077	o93-123	seal impression	clay	166.05	68.2	321.62						b	e
6.II	6.II.7	q12	275	077	o93-128	seal impression	clay	166.15	68.25	321.55	2.9	2.2	1			b	e
6.II	6.II.7	q12	275	077	o93-131	seal impression	clay	166	68.2	321.76	2.9	3.1	1			b	e
6.II	6.II.7	q12	280	077	o93-99	seal impression	clay	166.2	68.1	321.71	2.8	0.8	2.9			b	e
6.II	6.II.7	q12	275	077	o93-139	slingmissile	clay	165.95	68.1	321.7	5.2				3.3	c	e
6.II	6.II.7	q12	275	077	o93-154	slingmissile	clay	165.85	68.1	321.81	4.8				3	c	e
6.II	6.II.7	q12	275	077	o93-119	stopper	clay	166	67.5	321.91				5	8.8	d	e
6.II	6.II.7	q12	275	077	o93-155	stopper	clay	165	67.5	321.71	5	4.5	3.1			b	e
6.II	6.II.7	q12	275	077	o93-158	stopper	clay	166	68.25	321.74	2.5	1.3	0.9			b	e
6.II	6.II.7	q13	307	119	o91-61	token	clay	165.75	67.3	321.96						c	e
6.II	6.II.7	q13	307	119	o91-63	token	clay	165.5	67.25	321.83						b	e
6.II	6.II.7	q13	307	119	o91-68	token	clay	166	66.75	321.77						b	e
6.II	6.II.7	q12	280	077	o93-105	token	clay	166.25	68.25	321.7	2.8	2	0.6			b	e
6.II	6.II.7	q12	280	077	o93-109	token	clay	166.3	68.25	321.7				0.9	1.3	c	e
6.II	6.II.7	q12	280	077	o93-112	token	clay	165.9	68.2	321.7				1.3	1.7	b	e
6.II	6.II.7	q12	275	077	o93-124	token	clay	165.55	67.75	321.55				0.5	2.5	b	e
6.II	6.II.7	q12	275	077	o93-130	token	clay	166.05	68.1	321.78	2.3	2.1	0.4			c	e
6.II	6.II.7	q12	275	077	o93-132	token	clay	166.1	68.25	321.76	0.9	0.9				c	e
6.II	6.II.7	q12	275	077	o93-135	token	clay	165.85	68.2	321.7	1.8	1.7	0.5			b	e

BUILDING	ROOM	SQUARE	LOT	LOCUS	SITE FIND No.	CLASS	MATERIAL	EAST (m)	NORTH (m)	HEIGHT (m.a.s.l)	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
6.II	6.II.7	q12	275	077	o93-136	token	clay	166.05	68.15	321.7	1.4	1.6	0.6			b	e
6.II	6.II.7	q12	280	077	o93-144	token	clay	166.15	68.2	321.7	1.2	1	1.3			b	e
6.II	6.II.7	q12	275	077	o93-156	token	clay	165.95	68.2	321.76	2.5	1.6	0.9			d	e
6.II	6.II.7	q12	275	077	o93-159	token	clay	165.85	68.25	321.76	1.9	1.4	1.1			b	e
6.II	6.II.7	q12	280	077	o93-96	token	clay	166.15	68.15	321.73	2.5	2	0.6			d	e
6.II	6.II.7	q12	280	077	o93-98	token	clay	165.85	68.15	321.7					1.3	c	e
6.II	6.II.7	q13	307	119	s91-179	unworked pebble	stone	166	67.25	321.96	8.3				4.4	b	na
6.II	6.II.8	q13	267	094	s91-178	pounder/grinder	stone	164.4	67.25	321.82	7.7				4.9	c	e
6.II	6.II.8	q13	267	094	s91-177	rubber	stone	163.25	65.75	321.83	12	6.9	1.1			c	c
6.II	6.II.8	q13	339	094	s91-177	rubber	stone	164	66.5							c	c
6.II	6.II.9	q13	373	137	j93-4	awl	bone	164	64				0.9	0.9		b	e
6.II	6.II.9	q13	268	096	s91-83	grinding slab	stone	164.5	64.05	321.7	6.5	4	3.1			b	c
6.II	6.II.9	q13	268	096	s91-84	grinding slab	stone	164.55	64	321.7	6	5	2.9			b	c
6.II	6.II.9	q13	268	096	o91-27	token	clay	164.5	64	321.7					1.2	c	e
6.II	6.II.10	q13	360	121	s92-218	bowl	stone	165	62.05	321.3	21.5	10	4.4	10		b	c
6.II	6.II.10	q13	343	121	s91-270	grinding slab	stone	165	61.75	321.65	16	15.5	2.9			b	c
6.II	6.II.10	q13	308	118	s91-132	perforated disc	stone	166.1	62.6	321.71				0.3	4.1	b	e
6.II	6.II.10	q13	362	121	s92-234	perforated stone	stone	165	62.5	320.92	5.2				5.5	d	e
6.II	6.II.10	q13	324	121	s91-187	pounder/grinder	stone	164.9	62.1	321.59	28.5				7.3	d	e
6.II	6.II.10	q13	361	121	o92-323	spindle whorl	clay	164.5	62	321.04						c	c
6.II	6.II.10	q13	362	121	o92-334	stopper	clay	165	62.55							b	e
6.II	6.II.12	q13	249	084	s91-23	grinding slab	stone	162	67.6	322.52	10	7	3.3			b	c
6.II	6.II.12	q13	249	084	s91-24	grinding slab	stone	162	67.55	322.52	10	7.5	4.3			b	c
6.II	6.II.12	q13	249	084	s91-97	mortar	stone	161.75	67.5	322.52	10	7	3.3			b	c
6.II	6.II.12	q13	249	084	s91-22	rubber	stone	162	67.5	322.52	13.5	10	1.5			c	c
6.II	6.II.13	p13	350	116	b93-8	bead	bone	159	65.55	322.09	1.1	1	0.6			c	c
6.II	6.II.13	p13	350	116	s93-267	disc	stone	159.25	66.25	321.92				1.3	9.7	b	e
6.II	6.II.13	p13	381	116	p93-119	jar	pottery	160	65.5	321.97			11.5	9.5		b	c

BUILDING	ROOM	SQUARE	LOT	LOCUS	SITE FIND No.	CLASS	MATERIAL	EAST (m)	NORTH (m)	HEIGHT (m.a.s.l)	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
6.II	6.II.13	p13	370	116	o93-91	spindle whorl	clay	159.25	63.5	321.92				2.7	3	d	c
6.II	6.II.13	p13	370	116	o93-117	token	clay	159	65.6	321.82	22	2.1	1.8			b	e
6.II	6.II.13	p13	370	116	o93-90	token	clay	159	65.5	321.82				2	3.4	c	e
6.II	6.II.14	p13	380	139	j93-25	awl	bone	160.25	62.5	321.63						c	e
6.II	6.II.14	p13	380	139	s93-375	mortar	stone	160	63		5.6	2.4	1.5			b	c

BURNT VILLAGE LEVEL 6, BUILDING IX

BUILDING	ROOM	SQUARE	LOT	LOCUS	SITE FIND No.	CLASS	MATERIAL	EAST (m)	NORTH (m)	HEIGHT M.A.S.L.	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
6.IX	-	q12	190	047	f93-9	animal figurine	clay	165.5	71.75	322.62	2.8	1.8	4			b	c
6.IX	-	q12	260	047	f93-16	animal figurine	clay	166	71.55	322.3	3.1	1.8	2			b	c
6.IX	-	q12	179	047	f93-6	animal figurine	clay	166.5	71.5	322.55	3.9	3.1	1.5			b	c
6.IX	-	q12	179	047	f93-7	animal figurine	clay	166.9	71.9	322.53	4.5	5	2		2	b	c
6.IX	-	q12	173	045	f93-3	animal figurine	clay	166.5	71.55	322.73	9	2.5				b	c
6.IX	-	q12	254	047	j93-17	awl	bone	166.8	73.3	322.49	2.5	1.8	0.3			b	e
6.IX	-	q12	190	047	j93-12	awl	bone	165.25	72.8	322.4	5	0.8	0.5			b	e
6.IX	-	q12	282	047	s93-291	axe	stone	164.75	71.9	322.23	14	7.3			7.3	d	c
6.IX	-	q12	256	047	b93-6	bead	stone	166.75	72.75	322.33	0.3	0.3	0.1		0.3	c	c
6.IX	-	q12	208	047	p93-74	bowl	pottery	165.5	71.25	322.5	16			15	16	b	c
6.IX	-	q12	231	047	p93-36	jar	pottery	165.5	71.5	322.3					2.3,8.	c	c
6.IX	-	q12	190	047	s93-112	grinder	stone	165.6	71.9	322.6	4.5	2.5	8			c	e
6.IX	-	q12	207	047	s93-150	grinder	stone	166.4	71.1	322.46	8.3	6.4	3.5			c	e

BUILDING	ROOM	SQUARE	LOT	LOCUS	SITE FIND No.	CLASS	MATERIAL	EAST (m)	NORTH (m)	HEIGHT M.A.S.L.	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
6.IX	-	q12	156	037	s93-53	grinder	stone	164.5	72.2	322.33	9.1	6.7	1.4			c	e
6.IX	-	q12	153	037	s93-57	grinder	stone	164.5	72	322.77	9.3	6.2	4.4			d	e
6.IX	-	q12	238	047	s93-171	grinder	stone	164.75	72	322.75	15.5	9.5	7			c	e
6.IX	-	q12	207	047	s93-151	grinder?	stone	166	71	322.48	4.8	4	3.9			b	e
6.IX	-	q12	291	047	s93-322	grinding platform	stone	167.5	71.3	321.82	7.1	5.4				c	c
6.IX	-	q12	204	047	s93-148	grinding platform	stone	167.5	71.5	322.12	8.2	7.5	3.5			b	c
6.IX	-	q12	169	047	s93-476	grinding slab	stone	167.55	71.5	321.82	5.4	4.2	4.6			b	c
6.IX	-	q12	218	047	s93-157	hammer	stone	165.5	72	322.39	1.9			1	1.4,1.	b	e
6.IX	-	q12	190	047	f93-8	human figurine	clay	165.25	71.75	322.62	3.8	3.3	5.3			b	c
6.IX	-	q12	254	047	o93-52	human figurine	clay	167.8	73	322.37	5.2			5.2	2	b	c
6.IX	-	q12	254	047	o93-51	impressed clay	clay	167.75	73.05	322.37	3.5	2.5	0.7			b	e
6.IX	-	q12	255	047	j93-18	misc	bone	167.4	73.1	322.38	1.5	1.3	1.6			b	na
6.IX	-	q12	282	047	o93-86	misc	clay	165.25	71.65	322.15	2.3	1.8	3.8			b	na
6.IX	-	q12	190	047	o93-27	misc	clay	165	72.1	322.49	3.5	3.5		2.5	3.5	c	na
6.IX	-	q12	219	047	p93-43	bowl	pottery	165.5	72.6	322.34	10	10		9	10	b	c
6.IX	-	q12	166	044	s93-30	pendant	stone	165.5	73	322.72	3	3		3	1.8,1	c	c
6.IX	-	q12	221	047	o93-37	perforated disc	pottery	166.6	72.05	322.24	3.1	2.9	0.6			d	e
6.IX	-	q12	166	044	o93-190	perforated disc	pottery	165.05	73	322.7						b	e
6.IX	-	q12	254	047	s93-215	pestle	stone	167	72.4	322.4	4.5	2.5				b	c
6.IX	-	q12	156	037	s93-54	pestle	stone	164.5	72.05	322.33	9.1	7.8	3.4			d	c
6.IX	-	q12	159	037	s93-108	pounder/grinder	stone	164.5	72.15	322.34	2.5	2	0.5			c	e
6.IX	-	q12	190	047	s93-145	rubber	stone	165.65	71.7	322.6	11.5	3	3.5			d	c
6.IX	-	q12	190	047	s93-111	rubber	stone	165.5	72.1	322.59	14	7.5	1.3			c	c
6.IX	-	q12	156	037	s93-75	rubber	stone	164.5	72.1	322.4						c	c
6.IX	-	q12	254	047	p93-75	bowl	pottery	167.5	72.9	322.49	14	14			14	b	c
6.IX	-	q12	238	047	o93-43	slingmissile	clay	167.5	71.6	321.92	3.5	3	3.5		3.5	b	e
6.IX	-	q12	256	047	o93-54	slingmissile	clay	166.9	72.7	322.33	4	2.8		4	2.8	d	e
6.IX	-	q12	282	047	o93-85	slingmissile	clay	166.75	71.1	322.2	4	2.5		4	2.5	d	e

BUILDING	ROOM	SQUARE	LOT	LOCUS	SITE FIND No.	CLASS	MATERIAL	EAST (m)	NORTH (m)	HEIGHT M.A.S.L.	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
6.IX	-	q12	218	047	o93-35	slingmissile	clay	166.5	71.9	322.4	4.7	3.3	2.5			c	e
6.IX	-	q12	190	047	j93-11	spatula	bone	165.6	73	322.4	11.5	1.5	0.4			d	e
6.IX	-	q12	285	047	o93-87	spindle whorl	clay	167.1	73.5		1.4	2.6		1.4	2.6	d	c
6.IX	-	q12	218	047	o93-36	spindle whorl	clay	166.1	72.9	322.39	2.4	3.2		2.4	3.2	c	c
6.IX	-	q12	190	047	j93-14	stamp	shell	166	72.55	322.6	1.8	0.8	0.4			b	c
6.IX	-	q12	169	047	o93-14	token	clay	167.5	71.55	322.58	0.6	0.2		0.6	0.2	c	e
6.IX	-	q12	254	047	o93-50	token	clay	167.5	73.25	322.39	1.3	3.4		1.3	3.4	b	e
6.IX	-	q12	272	047	o93-83	token	clay	166	71.55	322.23	2.4	2.2	1.5			c	e
6.IX	-	q12	260	047	o93-58	token	clay	166	71.5	322.26	2.5		1.2		1.2	d	e
6.IX	-	q12	272	047	o93-84	token	clay	166	71.5	322.23	3.5	2.5	1.9			c	e
6.IX	-	q12	218	047	s93-158	token	stone	166	73	322.37	20.6	18.2	10.3			b	e
6.IX	-	q12	190	047	o93-33	token	clay	166	72.5	322.6	2	2			2	d	e
6.IX	-	q12	255	047	o93-53	token	clay	167.75	73	322.38	1.5	1.5			1.5	c	e
6.IX	-	q12	227	047	s93-165	grinding platform	stone	167.55	71.6	321.92	9	8.5	2.5			b	c
6.IX	-	q12	258	047	o93-55	vessel	stone	167.5	73	322.3	2.5	2.3				b	c
6.IX	-	q12	218	047	o93-41	vessel	stone	166.5	72.25	322.36						b	c

BURNT VILLAGE LEVEL 6, BUILDING XII

BUILDING	ROOM	SQUARE	LOT	LOCUS	SITE FIND No.	CLASS	MATERIAL	EAST (m)	NORTH (m)	HEIGHT (m.a.s.l)	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
6.XII	0	p12	198	111	b93-20	bead	stone	159.3	73	322.71	0.5	0.5	0.3		0.5	c	c
6.XII	0	p12	195	111	b93-15	bead	stone	150.8	77	323.2	1.1	1.1	0.3			b	c

BUILDING	ROOM	SQUARE	LOT	LOCUS	SITE FIND No.	CLASS	MATERIAL	EAST (m)	NORTH (m)	HEIGHT (m.a.s.l)	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
6.XII	0	q12	162	041	b93-2	bead	stone	162.3	77.55	323.1	12				0.8	c	c
6.XII	0	p12	196	111	s93-389	grinding slab	stone	155.3	77.25	323.07	8.4	5.4	5.4			b	c
6.XII	0	q12	170	042	s93-39	grinding slab	stone	162.5	74.55		13	11				b	c
6.XII	0	q12	163	041	j93-16	incised bone	bone	162.3	77.6	323.1	9.8	3.5	1.2			b	na
6.XII	0	p12	198	111	s93-392	misc	stone	152.9	76.25	322.98	3	1.9	0.8			b	na
6.XII	0	p12	195	111	b93-14	pendant	stone	154	77.5	323.01	2.8	0.11	1.11			b	c
6.XII	0	q12	162	041	s93-447	pestle	stone	162.3	77.5							c	c
6.XII	0	q12	164	042	s93-28	bowl	stone	162.5	74.6	322.9	2.5	2.5	1.7			b	c
6.XII	0	p12	195	111	s93-361	bowl	stone	154.5	77.5	323.12	15			5.4	15	b	c
6.XII	0	q12	164	042	o93-6	token	clay	162.5	74.5	322.9	3.7	1.3	1.3		1.3	c	e
6.XII	6.XII.1	q12	229	060	f93-11	human figurine	stone	167.3	79	323.01	3	2.2	1.8		2.2,1.	c	c
6.XII	6.XII.12	p12	186	106	v93-3	coating	stone	158	78.3	323.17						b	na
6.XII	6.XII.12	p12	187	106	f93-13	figurine	clay	158.5	78.75	323.17	1.8	1.1	1.9			b	c
6.XII	6.XII.2	q12	214	058	s93-156	grinder	stone	166.8	77.5	322.75	16.5	13.5	3.5			c	e
6.XII	6.XII.2	q12	214	058	s93-155	bowl	stone	166.5	76.5	322.75	13	10	2.4			b	c
6.XII	6.XII.3	q12	147	024	i23	awl	bone	164.5	75.3							b	e
6.XII	6.XII.3	q12	220	059	s93-160	grinder	stone	164.5	76.5	322.87	12.3	9	2.3			c	e
6.XII	6.XII.3	q12	246	067	s93-192	grinding slab	stone	164.8	76.5	322.56	7	4.3	3.8			b	c
6.XII	6.XII.3	q12	126	024	i25	misc	bone	164.5	75.25							b	na
6.XII	6.XII.3	q12	263	067	s93-233	pounder/grinder	stone	164.8	76.25	322.51	18	8	8		8	c	e
6.XII	6.XII.3	q12	246	067	s93-191	perforated stone	stone	164.4	76.25		7.8	5.5	5.5		5.5	b	e
6.XII	6.XII.3	q12	220	059	p93-41	bowl	pottery	164.5	77.75	322.9						c	c
6.XII	6.XII.3	q12	246	067	p93-50	bowl	pottery	164.5	76	322.56	8			8		b	c
6.XII	6.XII.6	p12	188	107	s93-194	mortar	stone	158.6	76.75		19	15.5	8.4			b	c

BUILDING	ROOM	SQUARE	LOT	LOCUS	SITE FIND No.	CLASS	MATERIAL	EAST (m)	NORTH (m)	HEIGHT (m.a.s.l)	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
6.XII	6.XII.7	p12	147	089	s93-25	grinding slab	stone	156.8	77.5		8	8	6.5			b	c
6.XII	6.XII.7	p12	192	108	v93-7	white ware	stone	156.8	77.55							b	na
6.XII	6.XII.8	p12	154	094	s93-100	grinding slab	stone	155.5	75.25		7	7	4			b	c

BURNT VILLAGE LEVEL 6, BUILDING XIV

BUILDING	ROOM	SQUARE	LOT	LOCUS	SITE FIND NO.	CLASS	MATERIAL	EAST (m)	NORTH (m)	HEIGHT (m)	LENGTH	WIDTH	THICK	HEIGHT	DIAMETER	CONDITION	CURATION
6.XIV	6.XIV.1	t14	16	16	s97-401	grinding slab	stone	194.95	58.95	320.17	12.7	14.6	6.7			b	c
6.XIV	6.XIV.1	t14	35	39	s97-547	grinding slab	stone	195.25	59.4	320.35	15	16	4			b	c
6.XIV	6.XIV.1	t14	16	16	p97-85	husking tray	pottery				15.9	12.9	12.7			b	c
6.XIV	6.XIV.1	t14	43	47	o97-305	perforated disc	pottery	197.25	58.8	320.23			0.7		4.8	d	e
6.XIV	6.XIV.1	t14	37	41	o97-344	perforated disc	pottery	196.3	58.9	320.28			0.5		2.4	c	e
6.XIV	6.XIV.1	t14	38	42	s97-548	pounder/grinder	stone	195	59.3	320.22	5	6	5.2			c	e
6.XIV	6.XIV.1	t14	16	16	p97-108	pot stand	pottery	194.98	59	320.17	18.7				10	b	c
6.XIV	6.XIV.1	t14	16	16	o97-139	spindle whorl	pottery	194.8	59.12	320.12	2.2				3.7	c	c
6.XIV	6.XIV.1	t13	50	67	o97-17	spindle whorl	pottery	192.65	58.6	320.20	2.5				2.9	c	c
6.XIV	6.XIV.2	t13	67	86	s97-262	bead	stone				2.2				1.5	c	c
6.XIV	6.XIV.2	t14	22	25	p97	bowl	pottery									b	c
6.XIV	6.XIV.2	t14	13	13	p97-35	bowl	pottery	193.6	58.6	320.35	11				20	b	c
6.XIV	6.XIV.2	t14	13	13	p97-36	bowl	pottery	192.2	58.95	319.27	8	4	4			b	c
6.XIV	6.XIV.2	t14	13	13	p97-86	bowl	pottery	191.85	59.35	319.27	11.8	9	1			b	c

BUILDING	ROOM	SQUARE	LOT	LOCUS	SITE FIND NO.	CLASS	MATERIAL	EAST (m)	NORTH (m)	HEIGHT (m)	LENGTH	WIDTH	THICK	HEIGHT	DIAMETER	CONDITION	CURATION
6.XIV	6.XIV.2	t14	31	35	s97-474	bowl	stone	193.6	58.6	320.5	4.9	4.1	1.9			b	c
6.XIV	6.XIV.2	t14	13	13	f97	figurine	clay	193.6	59.4	320.27						b	c
6.XIV	6.XIV.2	t14	13	13	f97	figurine	clay	193.2	58.6	320.25						b	c
6.XIV	6.XIV.2	t14	13	13	f97	figurine	clay	193.25	57.85	320						b	c
6.XIV	6.XIV.2	t14	13	13	f97	figurine	clay	192.3	58.15	319.98						b	c
6.XIV	6.XIV.2	t14	13	13	f97	figurine	clay	192.8	59.35	319.61						b	c
6.XIV	6.XIV.2	t14	13	13	f97	figurine	clay	192.05	58.9	319.27						b	c
6.XIV	6.XIV.2	t14	31	35	f97	figurine	clay	192.6	58.75	320.56						b	c
6.XIV	6.XIV.2	t14	27	30	f97	figurine	clay	192.15	58.55	320.23						b	c
6.XIV	6.XIV.2	t14	22	25	f97	figurine	clay	192.6	59.55	320.23						b	c
6.XIV	6.XIV.2	t14	31	35	f97	figurine	clay	192.5	59.25	320.55						b	c
6.XIV	6.XIV.2	t14	13	13	p97-54	bowl	pottery				12	8	1			b	c
6.XIV	6.XIV.2	t13	67	86	s97-261	grinder	stone				16.8	9.9	5.4			c	e
6.XIV	6.XIV.2	t14	13	13	s97-398	grinder	stone	193.8	59.45	319.97	10.1	9	2.9			b	e
6.XIV	6.XIV.2	t14	13	13	s97-399	grinder	stone	193.35	58.15	320.247	7.3	6.4	1.9			b	e
6.XIV	6.XIV.2	t14	13	13	s97-400	grinder	stone	195.01	59.05	320.36	12.2	11	8.7			c	e
6.XIV	6.XIV.2	t14	31	35	s97-477	grinder	stone	192.45	59.1	320.54	8.8				5.4	c	e
6.XIV	6.XIV.2	t14	31	35	s97-480	grinder	stone	192.7	58.75	320.36	9.8	8.8	4.4			c	e
6.XIV	6.XIV.2	t14	31	35	s97-540	grinder	stone	191.6	59.35	320.56	10.4	8.8	2.3			c	e
6.XIV	6.XIV.2	t14	31	35	s97-543	grinder	stone	192.15	59.3	320.55	13.2	6.8				c	e
6.XIV	6.XIV.2	t14	31	35	s97-544	grinder	stone	194.1	58.7	320.46	7.8	7.1	3.4			c	e
6.XIV	6.XIV.2	t14	31	35	s97-547	grinder	stone	192.45	58.65	320.37						b	e
6.XIV	6.XIV.2	t14	31	35	s97-473	grinding slab	stone	193.9	58.65	320.47	10.4	8.1	3.9			b	c
6.XIV	6.XIV.2	t14	31	35	s97-475	grinding slab	stone	193.6	59.35	320.47	9.4	7.3	3.9			b	c
6.XIV	6.XIV.2	t14	31	35	s97-476	grinding slab	stone	192.75	58.85	320.49	15.2	11.8	2.1			b	c
6.XIV	6.XIV.2	t14	31	35	s97-478	grinding slab	stone	192.25	58.6	320.55	9	6	3.2			b	c
6.XIV	6.XIV.2	t14	31	35	s97-541	grinding slab	stone	192.05	58.6	320.54	9.2	10.1	3.7			b	c
6.XIV	6.XIV.2	t13	71	95	o97	labret	clay	192.15	60.85	320.55	2.2				1.6	c	c

BUILDING	ROOM	SQUARE	LOT	LOCUS	SITE FIND NO.	CLASS	MATERIAL	EAST (m)	NORTH (m)	HEIGHT (m)	LENGTH	WIDTH	THICK	HEIGHT	DIAMETER	CONDITION	CURATION
6.XIV	6.XIV.2	t14	13	13	o97-133	labret	pottery	193.9	59.4	320.06	1.9				0.9	d	c
6.XIV	6.XIV.2	t14	13	13	o97-138	labret	pottery	192.7	58.85	320.27	1.4	1.2			1.4	c	c
6.XIV	6.XIV.2	t14	22	25	o97-180	labret	pottery	192.1	58.6	319.22	2.3	0.5	0.4			d	c
6.XIV	6.XIV.2	t14	31	35	o97-183	labret	clay	192.05	59.25	320.55	1.6				2.3	d	c
6.XIV	6.XIV.2	t13	71	95	s97-264	labret	stone	191.7	60.75	320.57	0.8				1.2	c	c
6.XIV	6.XIV.2	t14	13	13	o97	misc	clay	193.35	58.65	320.03						b	na
6.XIV	6.XIV.2	t14	13	13	o97	misc	clay	193.3	59.35	320.35						b	na
6.XIV	6.XIV.2	t14	13	13	o97	misc	clay	192.85	59	320.25						b	na
6.XIV	6.XIV.2	t14	31	35	o97	misc	clay									b	na
6.XIV	6.XIV.2	t14	13	13	o97-132	misc	pottery	193.3	58.55	320.02	7.3	8.1	6.6			d	na
6.XIV	6.XIV.2	t14	13	13	o97-135	misc	clay	192.6	59	320.25	4.8	5	2			b,sb	na
06.XI	6.XIV.2	t14	31	35	o97-185	misc	clay	192.55	59.35	320.51	1.8	1.6	1.2			b	na
6.XIV	6.XIV.2	t14	31	35	o97-188	misc	clay	192.3	58.9	320.38	4.6	4.1	2.5			d	na
6.XIV	6.XIV.2	t14	31	35	o97-211	misc	clay	192.1	58.9	320.53	2.9	2	2.1			b	na
6.XIV	6.XIV.2	t14	31	35	o97-212	misc	clay	192.5	59.25	320.55	1.7	1.2	1.2			b	na
6.XIV	6.XIV.2	t14	13	13	o97-303	misc	clay	193.3	58.75	320.44	4	3.3	3.1			b	na
6.XIV	6.XIV.2	t14	31	35	o97-304	misc	clay	192.3	58.75	320.49	6.7	4.9	3.8			c	na
6.XIV	6.XIV.2	t13	67	86	s97-259	misc	stone	192.4	60.4	320.55	6.1	5	3.3			c	na
6.XIV	6.XIV.2	t13	67	86	s97-263	palette	stone			320.58	5.9	5.8	0.9			c	e
6.XIV	6.XIV.2	t13	67	86	s97-260	perforated disc	stone	194.75	60.6	320.36	16.8	16.8	5.7		16.8	c	e
6.XIV	6.XIV.2	t14	31	35	s97-479	perforated stone	stone	192.5	59	320.38	9.4	4.8	4.2		1.9	c	e
6.XIV	6.XIV.2	t14	29	33	s97-749	polisher	stone				2.9	2.4	1.1			c	e
6.XIV	6.XIV.2	t14	31	35	p97-104	pot stove	pottery	193.3	58.75	320.44	13.2				28	b	c
6.XIV	6.XIV.2	t14	13	13	o97-137	pot stand	pottery	192.4	58.65	320.25	5.7	5.1	4.9			d	c
6.XIV	6.XIV.2	t14	22	25	o97-178	pot stand	pottery	192.65	58.6	320.20	4.4	3	2.7			b	c
6.XIV	6.XIV.2	t14	31	35	s97-542	pounder/grinder	stone								4.2	c	e
6.XIV	6.XIV.2	t14	31	35	s97-546	pounder/grinder	stone				5.8	4.7	4.6			c	e
6.XIV	6.XIV.2	t14	31	35	s97-750	pounder/grinder	stone	192.6	58.75	320.56	8.8	8	8			b	e

BUILDING	ROOM	SQUARE	LOT	LOCUS	SITE FIND NO.	CLASS	MATERIAL	EAST (m)	NORTH (m)	HEIGHT (m)	LENGTH	WIDTH	THICK	HEIGHT	DIAMETER	CONDITION	CURATION
6.XIV	6.XIV.2	t14	31	35	o97	seal	clay									b	e
6.XIV	6.XIV.2	t14	13	13	o97-136	spindle whorl	pottery				2.7				3.6	c	c
6.XIV	6.XIV.2	t14	31	35	s97-545	spindle whorl	stone	192.3	59	320.38					3	c	c
6.XIV	6.XIV.2	t14	22	25	o97-179	stopper	pottery	192	59.4	320.31	2.9				6.6	d	e
6.XIV	6.XIV.2	t14	22	25	o97-398	stopper	pottery				6.6	5.8	5.9			b	e
6.XIV	6.XIV.2	t14	13	13	o97	token	clay									c	e
6.XIV	6.XIV.2	t14	13	13	o97-134	token	clay	193.35	59.25	320.27					1.1	c	e
6.XIV	6.XIV.2	t14	22	25	o97-181	token	clay								1.8	c	e
6.XIV	6.XIV.2	t14	31	35	o97-182	token	clay	192.2	59.2	320.51	2.9	2.8	1.6			d	e
6.XIV	6.XIV.2	t14	31	35	o97-184	token	clay	192.15	59.18	320.54	1	0.9			1.7	d	e
6.XIV	6.XIV.2	t14	13	13	v97-9	whiteware	whiteware				6.1	4.5	1.1			b	na
6.XIV	6.XIV.3	s14	074	028	s97-772	bowl	stone	189.2	59.4	320.11	3.6	1.7	0.7			b	c
6.XIV	6.XIV.4	s14	112	031	s97-779	bowl	stone	187.4	58.9	319.88	2.1	1	0.8			b	c
6.XIV	6.XIV.4	s14	117	031	s97-782	perforated stone	stone	186.75	59.4	320.03	6.4				8.4	c	e
6.XIV	6.XIV.4	s14	105	032	s97-778	pounder/grinder	stone	186.7	55.25	319.92	1.3				2	b	e
6.XIV	6.XIV.4	s14	099	031	o97-388	token	clay	186.8	59.3	320.32	19	8.8	2.8			c	e
6.XIV	6.XIV.5	s14	089	030	s97-776	grinding slab	stone	186.8	57.6	320.04	53	30	14			b	c
6.XIV	6.XIV.5	s14	070	027	s97-810	grinding slab	stone	187.25	56.3	320.02	3.7	3.6	0.6			c	c
6.XIV	6.XIV.5	s14	064	025	o97-379	perforated disc	pottery	186.8	57.05	320.62	6	3.9	0.9			c	e
6.XIV	6.XIV.5	s14	064	025	o97-380	perforated disc	pottery	186.8	57.35	320.59	4.3	1.9	0.5			b	e
6.XIV	6.XIV.5	s14	062	023	o97-382	perforated disc	pottery	188.6	56.85	320.34	3.6	3.3	2			b	e
6.XIV	6.XIV.5	s14	062	023	s97-771	polisher	stone	187.05	57.3	320.58	3.9	2.9	1.8			b	e
6.XIV	6.XIV.5	s14	110	036	o97-287	slingmissile	clay	188.55	55.75	319.83	6.1	5.8	3.9			b	e
6.XIV	6.XIV.5	s14	059	021	o97-377	stopper	clay	186.5	57.15	320.72						b	e

BURNT VILLAGE LEVEL 6, OPEN AREAS 1-6

NUMBER	SQUARE	LOT	LOCUS	SITE FIND NO.	CLASS	MATERIAL	EAST (M)	NORTH (M)	HEIGHT (M.A.S.L.)	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
1	r11	020	008	j93-9	misc.	bone	175	81.6		4.2	0.7	0.3			b	na
1	r11	020	008	o93-23	disc	pottery	175	81.65		2.4			0.6	2.4	b	e
1	r11	020	008	o93-24	perforated disc	pottery	175.05	81.65		4.9	4.5	0.8			c	e
1	r11	020	008	s93-101	pendant	stone	175	81.7	322.54	2.5				1.4,0.9	c	c
1	r11	020	008	s93-108	bowl	stone	175	81.75	322.54	2.5	2	0.5			b	c
1	r12	117	065	s91-277	grinder	stone	179	73	322.17						b	e
1	r12	996	050	o91-194	labret	clay	178.6	70.75	322.13	2.9				1.4	c	c
1	s12	032	025	s91-261	bowl	stone	181.4	74.25	322.08	3.6	3.1	0.5		6	b	c
2	p12	148	086	b93-3	bead	Shell	151.7	77.6		1.1	1	0.6			c	c
2	p12	152	091	s93-99	bowl	stone	150.65	71.6	323.18	6.5			3	6.5	b	c
2	p12	158	091	s93-106	bowl	stone	151.5	71	322.95	12			3.2	12	b	c
2	p12	169	099	p93-31	vessel	pottery	157.5	74		7			7	6.6	b	c
2	p12	163	099	s93-105	grinding slab	stone	158	73		8	7	2			b	c
2	p12	167	099	s93-123	hammer	stone	158	72.5							d	e
2	p12	175	096	f93-10	human figurine	clay	156.5	71.75		2.2	2.2	2.2	1.6	2.2	b	c
2	p12	176	100	s93-133	mortar	stone	156.75	73.5		5.2	3.6	3.9			b	c
2	p12	149	090	s93-94	pounder/grinder	stone	158.9	72.5	323.08	6.8	3.4	2			b	e
2	p12	171	098	o93-32	perforated disc	pottery	156.5	71		3.3			0.7	3.3	d	e
2	p12	176	100	o93-31	perforated disc	pottery	156.5	74.05		3.7			0.7	3.7	c	e
2	p12	171	098	s93-130	pendant?	stone	157	70.75	322.74	4.3	2.5	2.4			c	c
2	p12	175	096	s93-132	bowl	stone	156	72		4.4	3.6	3.2			b	c
3	q12	261	071	f93-17	human figurine	clay	167.5	68.75	322.37	3	2.3	1.8			b	c
3	q13	176	048	o47	token?	clay	163.25	68.2							b	e
3	q12	134	025	i18	needle	bone	162	74							c	c

NUMBER	SQUARE	LOT	LOCUS	SITE FIND NO.	CLASS	MATERIAL	EAST (M)	NORTH (M)	HEIGHT (M.A.S.L.)	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
3	q13	350	127	o91-368	labret	clay	161	71		1.1			1		b	c
3	q13	350	127	o91-273	labret	clay	161	71.05							b	c
3	q12	126	024	i25	misc	bone	164.5	75.25							b	na
3	q12	147	024	i23	awl	bone	164.5	75.3							b	e
3	q12	292	056	o93-192	seal impression	clay	165	70.75							b	e
3	q12	253	056	o93-48	labret	clay	164.25	71.25		1.3	1.2			1.3	b	c
3	q12	135	033	i27	spatula	bone	164.5	74.25							c	e
3	q12	138	032	i20	awl	bone	166	74.25							b	e
3	q12	185	052	s93-70	stone bowl	stone	167.5	75		14		0.9	6	14	b	c
4	r13	183	060	o91-189	perforated disc	pottery	178	69.3	321.89	3.5			0.9	3.5	c	e
4	r13	217	106	s91-268	pestle	stone	177.25	70.25	322.19	24.4	8.8	6.4			c	c
4	r13	170	052	j91-18	awl	bone	177.5	68.25	322.09	6.2	1.6				d	e
4	r13	170	052	s91-209	pestle	stone	176.5	66.5	321.98	12.2				7.7	b	c
4	r13	170	052	s91-211	pestle	stone	178	64.6	321.93	12.6	4.6	7.3			b	c
4	r13	170	052	s91-208	grinding slab	stone	178.75	67	321.98	9.9	4.1	2.6			b	c
4	r13	170	052	s91-210	grinding slab?	stone	178.25	66.25	321.98	9.3	5.9	3.2			b	c
4	r13	170	052	o91-22	labret	clay	176.15	65.6	321.97	3.1	1.5			1.5,0.35	c	c
4	r13	170	052	s91-212	lid?	stone	179.5	64.75	321.98	14			3.3	14	c	e
4	r13	171	061	o91-404	slingmissile	clay	178.35	63.8	321.91						c	e
4	r13	171	061	o91-404	slingmissile	clay	178.35	63.75	321.91						c	e
4	r13	171	061	s91-214	mortar	stone	176.4	64.85	321.93	7.8	7.5	5.7			b	c
4	r13	240	061	p91-144	vessel	pottery	176	67	321.85	16			11	16	b	c
4	r13	177	053	p91-121	vessel	pottery	175.5	65.25	322.04	12	7	1.8	10		b	c
4	r13	194	057	s91-220	bowl	stone	177.1	61.7	321.86	10.4	7.5		6.2		b	c
5	r13	187	064	s91-218	misc	stone	171.25	65.75	322.06	3.8	2.3	1.1		2.3,1.1	b	na
5	r13	187	064	o91-191	perforated disc	pottery	172.25	66.35	322.02						c	e
5	r13	190	064	s91-219	grinding slab	stone	172.25	65	321						b	c
5	r13	190	064	s91-219	grinding slab	stone	172.25	65.05	321						b	c

NUMBER	SQUARE	LOT	LOCUS	SITE FIND NO.	CLASS	MATERIAL	EAST (M)	NORTH (M)	HEIGHT (M.A.S.L.)	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
5	r13	190	064	s91-219	grinding slab	stone	171.25	65.1	321.8						b	c
5	r13	198	064	s91-221	bowl	stone	171.25	63.4	321.86	3.2	3.3	0.8			b	c
5	r13	198	064	s91-222	token	stone	170.6	63.75	321.59	3.5	2.5	0.6			c	e
5	r13	199	064	b91-16	bead	stone	175.1	65.8	321.76						c	c
6	q15	442	116	s92-151	pounder/grinder	stone	169.25	48.15		4.5				4.5	c	e
6	q15	442	116	s92-152	pestle	stone	169.25	48.1		14.8	6.4	6			d	c
6	q15	442	116	o92-168	slingmissile	clay	169.25	48		5.6	3.4	3			d	e
6	q15	442	116	o92-167	slingmissile	clay	169.25	48.05		6	3.4	3			c	e
6	q15	351	100	j92-16	awl	bone	166.5	44.65							c	e
6	q15	371	100	s92-113	axe	stone	166.55	44.6		4.7	2.6	0.8			d	c
6	q15	356	100	o92-93	figurine?	clay	166.55	44.65		3.6	1.6	1.1			b	c
6	q15	335	084	o92-73	figurine?	clay	167.1	42.4		5.5	5.1	3.8			b	c
6	q15	335	084	o92-72	loom weight?	clay	167.1	42	318.86	15.7			11.3	15.7,12	d	e
6	q15	335	084	o92-74	slingmissile	clay	167	45		4.8	3.9				c	e
6	q15	371	100	o92-104	spindle whorl	clay	166.5	44.7		3.6			1.9	3.6	d	c
6	q15	371	100	p92-61	vessel	pottery	166.5	44.55		11			18	11	c	c
6	q15	356	100	p92-44	vessel	clay	166.55	44.55		12		1.6		12	b	c
6	q15	415	096	b92-18	bead	stone	168.5	45		1.2	1.2	1.2		1.2	c	c
6	q15	377	096	s92-124	grinder	stone	168.5	47.5							b	e
6	q15	415	096	o92-131	token?	clay	168.25	44.75		2.7	2.1	1.8			b	e
6	q15	412	096	p92-76	vessel	pottery	168.5	45.1		7			4.5	7	b	c
6	q15	425	097	j92-31	awl	bone	168.5	42.55							b	e
6	q15	350	097	o92-86	slingmissile	clay	168.5	42.5		4.6	3.5	3.3			c	e
6	q15	425	097	j92-30	spatula	bone	168.5	42.6							c	e

T12 MIDDEN DEPOSITS (SOUNDING), LEVELS 7-6.

SQUARE	LOT	LOCUS	SITE FIND No.	CLASS	MATERIAL	EAST (m)	NORTH (m)	HEIGHT (m.a.s.l)	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
t12	43	73	o97-73	figurine	clay	194.6	72.9	321.38	2	1.3		1		b	c
t12	29	67	s97-321	axe	stone	199.4	78.4	321.09	5.2	5.2	1.5			b	c
t12	29	72	b97-24	bead	stone	193.45	73.6	320.95	2.8	2		0.8	0.6	c	e
t12	29	92	b97-26	bead	stone	199.05	72.65	320.03	0.2	0.35			0.18	c	c
t12	29	55	s97-319	bowl	stone	198.9	78.15	321.13	4	4	8			b	c
t12	29	68	s97-452	bowl	stone	197	73.85	320.83	6.7	1	6.8		14	b	c
t12	29	72	p97-51	bowl	pottery			32.95	7.6		7.6			b	c
t12	29	80	s97-454	bowl	stone			320.7	2.8				6.5	b	c
t12	29	80	s97-456	bowl	stone			320.7	7.6	5.9	1.8			b	c
t12	29	92	p97-80	bowl	pottery			319.94	1.4	10		20		b	c
t12	29	92	s97-467	bowl	stone			320.11, 320.0		5.3	2.6			b	c
t12	29	105	p97-205	bowl	pottery			319.67	10.7	10.8		9.6		b	c
t12	29	72	s97-455	bracelet	stone	192.1	71.95	321.08	1.9	1.3	1.1			b	c
t12	29	74	o97-163	disc	pottery			320.62	5.7	4.3		1		d	e
t12	29	85	p97-79	goblet	pottery			320.38	1.2	11		9		b	c
t12	29	68	s97-448	grinder	stone	197.4	74.2	320.97	12.8	11.9	3.8			b	e
t12	29	72	s97-453	grinder	stone	192.8	74.95	320.9	8	7.5	4.6			b	e
t12	29	75	s97-460	grinder	stone	193.7	72.75	320.86	7.5	5.5	1.5			b	e
t12	29	75	s97-458	grinder	stone	198.5	72.65	320.58	14.6	8.3	3.4			b	e
t12	29	84	s97-736	grinder	stone	198.05	72.9	320.48	8.6	7.6	5			b	e
t12	43	77	s97-462	grinder	stone	198.1	194.2	320.53	7.4	2.9	3			b	e
t12	35	71	s97-451	grinding slab	stone	191.9	73.8	321.12	10.2	7.3	2.4			b	c
t12	29	45	s97-316	grinding slab	stone	198.45	78.4	321.12	14	5.7	4			b	c
t12	29	55	s97-320	grinding slab	stone	198.4	77.45	321	8.9	7.1	6.6			b	c
t12	29	79	s97-324	grinding slab	stone	198.8	75.2	320.42	6.1	5.2	3.3			b	c

SQUARE	LOT	LOCUS	SITE FIND No.	CLASS	MATERIAL	EAST (m)	NORTH (m)	HEIGHT (m.a.s.l)	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
t12	29	88	s97-466	grinding slab	stone	198.4	71.15	320.01	11.9	7.8	4.3			b	c
t12	29	92	s97-471	grinding slab	stone	198	72.55	319.92	5.7	4.9	5.3			b	c
t12	29	68	s97-449	grinding slab	stone	197.8	73.8	320.79	8.1	3.5	4.6			b	c
t12	12	11	s97-313	hammerstone	stone	194.6	73.85	321.4	9.8	4.5	2.6			c	e
t12	43	78	p97-53	husking tray	pottery	191.7	76.7	321.24	18	10				b	c
t12	45	82	p97-52	jar	pottery	198.45	78.6	320.43	11.5				7, 4.5	c	c
t12	29	33	o97-35	labret	clay	199.2	75.6	321.18	1				1.8	b	c
t12	29	49	o97-55	labret	clay	198.7	71.5	320.92	0.5	0.8		0.9		b	c
t12	29	68	o97-123	labret	clay	196.05	73.8	320.99	1.2				1.2,1.	d	c
t12	29	79	o97-74	labret	clay	199	71.3	320.54	3.6	1.6		1.6		c	c
t12	29	80	o97-87	labret	clay	199.1	77.4	320.65	1.6	1.5		1.4		c	c
t12	29	87	o97-200	labret	pottery	198.7	72.1	320.38	1				1.7,	b	c
t12	29	92	o97-167	labret	clay	197.7	71.7	320	1.4	1.3		0.8		b	c
t12	43	77	o97-160	labret	clay	198.1	72.25	320.48	1.4				1.7,1.	c	c
t12	43	77	s97-461	labret	stone	197.3	72.75	320.46	2.1				1.4	d	c
t12	29	75	s97-459	lid/palette	stone	192.1	70.85	320.86	6.4	6.2	1.4			b	e
t12	43	77	p97-87	loamer	pottery			320.46	7.3	4.4		1.2		c	e
t12	29	60	o97-171	loamers(2)	potsherd	198.25	73.15	319.94	4.5	3.6,		0.8,		c	e
t12	29	47	o97-53	misc	clay	192.85	76.15	321.06	2.4	2.2		1.8		c	na
t12	29	62	o97-93	misc	clay	197.35	74.45	320.4	1.8	1.4		1.1		b	na
t12	29	79	o97-91	misc	clay	196.8	75.85	320.48	1.6	1.1		0.7		b	na
t12	29	79	o97-92	misc	clay	198.7	75.25	320.42	3.8	2.9		2.8		b	na
t12	29	80	o97-86	misc	clay	197.4	72.65	320.56	2	1.8		1.5		b	na
t12	29	80	o97-81	misc	clay	198.9	74.65	320.51	2.5	2.5		1.8		d	na
t12	29	80	o97-75	misc	clay	197	78.5	320.8	2.8	2		1.7		b	na
t12	29	80	o97-84	misc	clay	196.65	76.85	320.58	3.4	3		1.1		b	na
t12	29	80	o97-77	misc	clay	192.5	73.15	320.75						b	na
t12	29	88	o97-165	misc	clay	198.95	171.65	320.08	2.1	1.9		1.4		c	na

SQUARE	LOT	LOCUS	SITE FIND No.	CLASS	MATERIAL	EAST (m)	NORTH (m)	HEIGHT (m.a.s.l)	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
t12	29	105	s97-739	macehead	stone	198.4	70.6	319.78	7.6	5.1	6.1			b	c
t12	2	2	s97-315	mortar	stone				7.1	5.4	2.1			b	c
t12	1	1	s97-45	pounder/grinder	stone	193.65	76.4	321.25	14	7.8		6.2		c	e
t12	29	29	s97-245	palette	stone	197.3	75.8	321.3	2.9	2.2	0.9			b	e
t12	47	99	s97-738	palette	stone	197.2	71.95	319.81	11.1	4.5	4.2			b	e
t12	13	16	o97-5	perforated disc	pottery	194.95	71.8	321.36	3.9	3.9		0.6	3.9	c	e
t12	29	23	o97-33	perforated disc	pottery	197.55	74.05	321.19	4.6	4.4		0.7		c	e
t12	29	33	o97-36	perforated disc	pottery	198.1	75.2	321.16	3	2		0.6		b	e
t12	29	60	o97-58	perforated disc	pottery	196.5	74.8	321.03	3.8	3.9		0.9		d	e
t12	29	73	s97-323	perforated disc	stone	198.9	75.9	320.76	3.4	1.5	0.6			b	e
t12	29	75	o97-157	perforated disc	pottery	197	70.9	320.75						b	e
t12	29	79	o97-89	perforated disc	pottery	198.3	79.45	320.71	2.4	2.4		0.6		c	e
t12	29	80	o97-80	perforated disc	pottery	199.1	74.7	320.51	4.3	4.1		0.6		c	e
t12	29	84	o97-199	perforated disc	pottery	197.3	71.6	320.48	4.9			0.8	4.9	b	e
t12	29	88	s97-464	perforated disc	stone	199.1	72.6	320.11	4.6	4.3	0.9			c	e
t12	29	92	o97-170	perforated disc	pottery	198.65	73.25	319.94	3.8	3.5		0.7		c	e
t12	47	103	o97-393	perforated disc	pottery	198.55	74.6	320.08	3.2	2.8	0.6			c	e
t12	29	55	s97-317	pebble	stone	197.65	78.12	321.13	2.9	0.75	0.7			c	na
t12	16	20	b97-9	perforated stone	stone	192.65	72.85	321.46	1.7	1.5		1.8		c	e
t12	29	67	s97-322	polisher	stone	199.35	79.35	320.97	3.9	3.2	0.7			c	e
t12	29	83	s97-457	polisher	stone	198.2	75.7		2.1	1.6	1.2			c	e
t12	29	73	o97-42	sealing	clay	198.8	74	320.9	1				2.5	c	e
t12	29	73	o97-41	sealing	clay	193.85	74.85	320.91	3.7	3.4		2.5		b	e
t12	29	80	o97-125	sealing	clay	198.85	75.7	320.63	3.5	1.5		1.3		b	e
t12	29	81	o97-145	sealing	clay	198.55	76	320.36	3.7	3		2.1		b	e
t12	29	93	o97-144	sealing	clay	198	72.3	320.01	3	2.8		1.4		c	e
t12	43	77	o97-127	sealing	clay			320.46	3.4	2.1		1.9		b	e
t12	43	77	o97-43	sealing	clay	197.6	71.5	320.56	3.5	2.4		1.6		b	e

SQUARE	LOT	LOCUS	SITE FIND No.	CLASS	MATERIAL	EAST (m)	NORTH (m)	HEIGHT (m.a.s.l)	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
t12	43	77	o97-44	sealing	clay	196.5	72	320.43	5	4.4		2.1		b	e
t12	29	74	o97-156	slingmissile	clay	198	73.4	320.62	3.8	2		1.4		d	e
t12	29	79	o97-88	slingmissile	clay	198.1	77.25	320.63	3.2	3.1		2.9		c	e
t12	29	92	o97-168	slingmissile	clay	199.38	72.7	320.04	4	2.4		1.7		d	e
t12	29	29	o97-34	spindle whorl	clay	197.8	76.9	321.31	1.4				4.1	b	c
t12	29	88	o97-175	spindle whorl	clay	199.25	73.5	320.13	3	2.9		1.2		c	c
t12	29	105	o97-206	spindle whorl	pottery	198.05	70.7	319.67	3.1	3	2.2			d	c
t12	29	92	p97-81	bowl	pottery			319.94	10	11.5		21		b	c
t12	29	45	o97-50	token	clay	198.05	74.55	321.12	1.5	1.8		1.7		c	e
t12	29	45	o97-51	token	clay	197	73.9	321.17	2.2	1		0.8		b	e
t12	29	60	o97-59	token	clay	199.1	75.5	320.94	1.55	1.4		0.6		c	e
t12	29	67	o97-62	token	clay	198.2	77.75	320.83	1.4	1.2		0.6		c	e
t12	29	68	o97-64	token	clay	197.2	77.25	320.86	1.9	1.8		0.7		c	e
t12	29	72	o97-70	token	clay	193.35	72.85	320.89	1.3	1.3		1.1		c	e
t12	29	72	o97-68	token	clay	193.2	73.6	320.95	1.5	1.4		0.7		c	e
t12	29	72	o97-65	token	clay	193.3	73.6	320.95	2.4	2.4		0.9		c	e
t12	29	73	o97-67	token	clay	193.35	74.85	320.9	1.2	1.2		0.5		c	e
t12	29	73	o97-69	token	clay	193.35	72.55	321.02	1.2	1		0.9		c	e
t12	29	73	o97-72	token	clay	194.4	75.4	320.91	1.2	1.2		1.2		c	e
t12	29	73	o97-66	token	clay	191.4	71.9	321.04	1.6	1.6		1.2		c	e
t12	29	73	o97-71	token	clay	195.6	72.7	320.87	2.3	2.1		2		d	e
t12	29	75	o97-158	token	clay	191.2	73.65	320.9	0.9				1.2	c	e
t12	29	75	o97-159	token	clay	198.5	73.5	320.86	1.4	1.2		0.9		c	e
t12	29	79	o97-90	token	clay	197	78.65	320.65	2.1	1.9		0.6		d	e
t12	29	80	o97-85	token	clay	198.8	77.8	320.63	1.2	1		0.9		b	e
t12	29	80	o97-78	token	clay	197.9	71.5	320.75	1.3	1.3		0.8		b	e
t12	29	80	o97-79	token	clay	196.75	77.6	320.75	1.3	1		1		c	e
t12	29	80	o97-83	token	clay	199.2	75.9	320.61	1.4	1.3		1.2		c	e

SQUARE	LOT	LOCUS	SITE FIND No.	CLASS	MATERIAL	EAST (m)	NORTH (m)	HEIGHT (m.a.s.l)	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
t12	29	80	o97-82	token	clay	197.45	76.95	320.58	2.2	2		0.4		d	e
t12	29	80	o97-76	token	clay	197.15	71.1	320.73						c	e
t12	29	82	o97-172	token	clay	198.5	73.15	319.94	3.3	2.9		1.9		d	e
t12	29	88	o97-166	token	clay	197.8	72.5	320.05	1.2	1.1		1		c	e
t12	29	88	o97-161	token	clay	199.35	70.65	320.09	1.3	1.3		1.1		c	e
t12	29	88	o97-164	token	clay	198.9	73.1	320.11	2.1	1.8		1.3		c	e
t12	29	92	o97-169	token	clay	197.7	71.3	320	2.7	2.2		1.1		b	e
t12	29	92	o97-173	token	clay	192.6	79.35	319.92	3.2	2.5		2		c	e
t12	29	102	o97-292	token	clay			320.51	1	0.9	0.8			c	e
t12	47	103	o97-297	token	clay	197.3	72.3	319.7	1	0.9	0.7			c	e
t12	47	103	o97-293	token	clay	197.6	72.35	319.68	1.3				1.3	c	e
t12	47	103	o97-295	token	clay	197.3	77.1	319.53	1.5	1.2	1.1			c	e
t12	47	103	o97-294	token	clay	197.3	77.55	320.51	1.6	1.2	0.8			d	e
t12	47	104	o97-296	token	clay	197.65	72.3	319.7	1.2	1.1	0.8			c	e
t12	47	105	o97-391	token	clay			319.78	1.6	1.3	0.8			c	e
t12	47	105	o97-394	token	clay	198.4	75.25	320.18	1.6	1.8	0.8			d	e
t12	47	105	o97-392	token	clay	198.3	71.3	319.67	1.7	1.7	0.5			b	e
t12	47	105	o97-395	token	clay	198.4	75.25	320.03	1.9	1.3	1.3			c	e
t12	43	77	s97-463	whetstone	stone	198	72.6	320.46	7.5	3.4	2.2			b	e
t12	29	29	v97-11	whiteware (2)	-			320.01	6.6	2.1	5.1			b	na
t12	29	45	v97-12	whiteware	-	191.6	77	321.29	12.6	7.6	2.7			b	na
t12	29	80	v97-26	whiteware	-	198.3	76.5	320.61	8.7	5	3			b	na
t12	47	99	v97-30	whiteware	-	198.25	73.8	320.04	7.5	6.1	2			b	na
t12	47	103	v97-25	whiteware (3)	-	197.65	74.6	320.15	6.4	4.5	1.6			b	na

LEVEL 5, BUILDING I

BUILDING	ROOM	SQUARE	LOT	LOCUS	SITE FIND No.	CLASS	MATERIAL	EAST (m)	NORTH (m)	HEIGHT (m.a.s.l)	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
5.I	0	q15	130	043	j92-1	awl	bone	160.75	41.5							c	e
5.I	0	q15	112	031	b11	bead	stone	167.25	48.5							c	c
5.I	0	q15	182	048	b92-2	bead	shell	164	42.55		1	0.85	0.85			c	c
5.I	0	q15	102	022	s106	labret	stone	167.25	47.3							b	c
5.I	0	q15	155	048	s92-9	pendant	stone	162.5	42.4		2.6	1.5	0.5			b	c
5.I	0	q15	155	048	s92-8	bowl	stone	165.1	44.3		20			8.4	20	b	c
5.I	0	q14	133	051	o92-1	slingmissile	clay	166.5	44.5		5				3	c	e
5.I	0	q15	182	048	o92-5	token	clay	164	42.5		4	2.8	2.8			b	e
5.I	5.I.2	q14	178	062	s92-21	grinder	stone	163.8	51.75	320.39	14.1	8.6	8.1			d	e
5.I	5.I.2	q14	175	062	o92-7	spindle whorl	clay	163.75	51.6	320.54	2	2	1.7			c	c
5.I	5.I.3	q14	181	063	o92-9	perforated disc	pottery	163.25	50.5	320.43	3.3	2.7	0.5			d	e
5.I	5.I.4	q14	183	080	j92-7	awl	bone	167.2	50.7	320.22						b	e
5.I	5.I.6	q15	161	053	p92-4	bowl	pottery	169.25	48.5							b	c
5.I	5.I.7	q15	163	036	b92-1	bead	stone	166	47.65		0.9	0.9	0.25			c	c
5.I	5.I.7	q15	270	036	s92-39	rubber?	stone	167	48							b	c
5.I	5.I.8	q15	160	037	j92-4	awl	bone	163	48.75							d	e
5.I	5.I.8	q15	160	037	j92-5	awl	bone	163.75	48.5							b	e
5.I	5.I.8	q15	160	037	s92-10	axe	stone	165.25	48.25		9.9	5.3	2.8			d	e
5.I	5.I.9	q15	240	062	s92-31	grinding slab	stone	161.5	44.55		8	7.1	4			b	c
5.I	5.I.10	q15	211	063	s92-19	arrow shaft straight	stone	164	45.05		6.5	6	2.6			b	c
5.I	5.I.10	q15	211	063	s92-17	grinder	stone	163	45.8	319.68	16	14.3	3.5			c	e
5.I	5.I.10	q15	231	063	s92-26	grinding slab	stone	164	45		15.3	15.6	2.8			b	c
5.I	5.I.10	q15	282	063	s92-42	grinding slab	stone	164.2	44.7		12.6	9.5	2.9			b	c
5.I	5.I.10	q15	211	063	s92-16	labret	stone	163.2	45.45	319.86	1.6			1	1.6,1.	c	c

BUILDING	ROOM	SQUARE	LOT	LOCUS	SITE FIND No.	CLASS	MATERIAL	EAST (m)	NORTH (m)	HEIGHT (m.a.s.l)	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
5.I	5.I.10	q15	229	063	s92-22	mortar	stone	163.4	45.2		12			6.2	12,11	b	c
5.I	5.I.11	q15	127	040	s92-4	rubber	stone	165.6	45.9		6.6	5	1.6			b	c
5.I	5.I.11	q15	127	040	s92-5	rubber	stone	165.9	45.6		7.5	5.6	3.6			b	c
5.I	5.I.11	q15	249	040	s92-25	unworked flat stone	stone	165.75	45.35		9	3.7	1.4			c	na
5.I	5.I.12	q15	280	039	s92-41	grinding slab	stone	167.75	44.9							b	c
5.I	5.I.14	q15	209	061	s92-18	labret	stone	163.6	41.75	319.4	1.8	0.8	0.5		0.8,0.	c	c
5.I	5.I.14	q15	197	061	o92-35	loamer	pottery	163	41		4.9	4.8	1.1			c	e
5.I	5.I.14	q15	206	060	j92-6	needle	bone	165.25	41.75	319.42						b	c
5.I	5.I.14	q15	241	060	v92-1	ochre	ochre	165.5	40.85							b	na
5.I	5.I.14	q15	241	060	o92-13	perforated disc	pottery	165.95	41.75		2.5	2.5	0.5			d	e
5.I	5.I.14	q15	197	061	s92-46	bowl	stone	163	41.05		23	23		42	23	b	c
5.I	5.I.14	q15	232	064	o92-10	token	clay	163.5	42.5		3.5	3.2	3.2			c	e
5.I	5.I.14	q15	216	060	o92-6	token	clay	166	40.85		1	1	1			c	e
5.I	5.I.15	q15	151	038	j92-3	awl	bone	161.5	48							b	e
5.I	5.I.15	q15	255	038	s92-33	grinder	stone	164	47		6	5.6	3.1			b	c
5.I	5.I.16	q15	276	051	j92-9	awl	bone	165	52.75							b	e
5.I	5.I.16	q15	268	049	s92-32	axe	stone	169	45.05		5.9	5	2.3			b	c
5.I	5.I.16	q15	291	071	s92-54	grinding slab	stone	169.25	44.1		8	7.5	6.1			b	c
5.I	5.I.16	q15	140	044	s92-6	rubber	stone	168	43		7.5	6.4	2.6			d	c
5.I	5.I.16	q15	140	044	s92-7	perforated stone	stone	168	43.05		9	8.5	5.4			d	e
5.I	5.I.16	q15	272	044	s92-45	bowl	stone	167.75	42.55		5.6	1.6	1			b	c
5.I	5.I.16	q15	272	044	o92-29	slingmissile	clay	167.75	42.5		4.6	3	3			c	e
5.I	5.I.16	q15	338	085	o92-81	slingmissile	clay	169	44		4.2	3.2	3			d	e
5.I	5.I.16	q15	140	044	s92-40	vessel	stone	168	43.1							b	c

LEVEL 5, BUILDING II

BUILDING	ROOM	SQUARE	LOT	LCSUS	SITE FIND No.	CLASS	MATERIAL	EAST (m)	NORTH (m)	HEIGHT (m.a.s.l)	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
5.II	5.II.1	q12	079	013	o10	perforated disc	pottery	167.55	71.55							b	e
5.II	5.II.1	q12	129	036	i16	awl	bone	164	72.5							c	e
5.II	5.II.1	q12	130	035	i17	spatula	bone	162.05	71.4	322.98						b	e
5.II	5.II.1	q12	130	035	i19	awl	bone	161.95	71.5	322.98						b	e
5.II	5.II.1	q12	130	035	w8	spindle whorl	clay	162.1	71.55	322.98						c	c
5.II	5.II.1	q12	130	035	w7	spindle whorl	pottery	161.25	72.5	323.07						c	c
5.II	5.II.1	q12	130	035	o12	perforated disc	pottery	163.5	72							c	e
5.II	5.II.1	q12	150	035	p66	bowl	pottery	163.5	72.15							b	c
5.II	5.II.1	q12	150	035	p65	bowl	pottery	163.5	72.1							b	c
5.II	5.II.1	q12	150	035	p64	jar	pottery	163.5	72.05							b	c
5.II	5.II.1	q14	184	081	p92-9	coarse ware bowl	pottery	169.3	52	320.36					14	b	c
5.II	5.II.2	r14	094	031	j93-26	misc	bone	172.75	57.25	321.14	5.5	2.3	0.3			b	na
5.II	5.II.2	r14	094	031	s93-421	unworked flat stone	stone	172.75	57.3	321.14	5.3	4.5	0.9			c	na
5.II	5.II.2	r14	094	031	s93-420	rubber	stone	172.75	57.4	321.2	16.6	12.1	2.5			b	c
5.II	5.II.2	r14	094	031	s93-419	unworked flat stone	stone	174.5	55.5	321.09	6.6	3.3	0.7			b	na
5.II	5.II.3	r14	088	030	o93-167	labret	pottery	176.9	54.55	320.47	2.2				1.1	c	c
5.II	5.II.4	r14	117	044	o93-188	labret	clay	179.25	55.25	320.75	2.4				1	c	c
5.II	5.II.7/8	q12	082	011	o24	perforated disc	pottery	167.5	74.5							c	e
5.II	5.II.2/3/4/5	q12	087	021	s49	pendant	stone	163	75							b	c
5.II	5.II.3/4	r14	110	037	s93-444	unworked flat stone	stone	172	56	320.57	6	4.8	1.4			b	na
5.II	5.II.3/4	r14	110	037	o93-178	misc	clay	175	57	320.5						b	na
5.II	5.II.3/4	r14	110	037	s93-443	mortar	stone	175.5	55.5	320.39				5.2	11	b	c
5.II	5.II.3/4	r14	110	037	o93-177	labret	clay	179	55.5	320.5	2				1.2	b	c
5.II	5.II.3/4	r14	113	037	s93-475	rubber	stone	176.5	55.5	320.48	10	7	3.2			b	c

BUILDING	ROOM	SQUARE	LOT	LCSUS	SITE FIND No.	CLASS	MATERIAL	EAST (m)	NORTH (m)	HEIGHT (m.a.s.l)	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
5.II	5.II.3/4	r14	113	037	o93-179	misc	clay	175	56.5	320.48						b	na

APPENDIX 3

JERABLUS TAHTANI DATABASE

CONTENTS

NOTES ON FIELDS AND CONTEXT CLASSIFICATIONS UTILISED IN JERABLUS TAHTANI DATABASE

There follows a brief note defining each of the fields used in the Jerablus database. This database differs in a few respects from those of Sabi Abyad and Mylouthkia. The most notable difference is in the utilization of context classes (below). Where data is unavailable cells are left blank.

DATABASE FIELDS: DEFINITIONS

- Level:	intra-area not intra-site level occupation level
- Context no:	record of the unit number.
- Context Class:	settlement contexts are classified as follows:
B	bench
COL	building collapse
Dr	drain construction
DF	drain fill
ENT	entrance/threshold
F	fill (of structure)
Fl	floor
G	general deposits, without clear structural association or evidence of trampled surfaces these commonly comprise a mix of disturbed material.
H	hearth
OD	occupation deposit
Ov	oven
PF	pit fill
PS	potspread
PV	pavement
R	room
SFW	stone founded wall
T	tomb
TW	tower
W	wall
- Supra-context no:	refers to the larger feature (e.g. pit or building) of which the context is a part.
- Site find no.:	project small find number.
- Class:	artefact classification follows the classification system used by Jerablus Tahtani project (see **Appendix 1**)
- Material:	refers to the material of manufacture and follows simple divisions (e.g. pottery, stone, clay, metal, bone, antler and shell)
- Length	
- Width	
- Thickness	
- Height	
- Diameter	
- Condition:	artefacts are classified as complete or broken.
- Curation:	artefacts are classified as curated (c)or expedient (e) (for general distinction see **section 4.3.3**). Where artefacts are not classifiable 'na' appears.

AREA I, LEVEL 4

AREA LEVEL	CONTEXT	CONTEXT CLASS	SUPRA-CONTEXT	SF NUMBER	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	FRAGMENT	CURATION
4	2533	F	2423	2910	bobbin	pottery	5.7				4.6	c	c
4	2533	F	2423	2939	bobbin	pottery	4.9				4.1	c	c
4	2135	F	2102	3287	bowl	pottery				4.9	14	c	c
4	2150	F	2024	3032	bowl	pottery			1.9	7.8	15.5	c	c
4	1195	F		2792	disc	pottery			1.5		95	b	e
4	1707	G		2323	disc	pottery	6.3	3.1	1.1			b	e
4	1868	G		2373	disc	stone				1.6	3.6	b	e
4	1969	G		2402	disc	pottery			1		6	b	e
4	2150	F	2024	3055	disc	pottery			1.2		4.7	c	e
4	2161	G		2672	disc	pottery			8		4.2	c	e
4	2546	W		2908	disc	pottery			8		4.2	c	e
4	2555	F	3027	3275	disc	pottery			0.7		4.2	c	e
4	1195	F		1332	disc?	pottery	3.7	2.5	6			b	e
4	1969	G		2433	figurine	clay	3.4	1.6		1.6		b	c
4	2075	F	2102	2527	misc	metal	2.1				2	b	na
4	2135	F	2102	3482	misc	clay						b	na
4	1969	G		2974	misc.	stone	7	7.3	35			b	na
4	1868	G		3242	pin	metal	3.1				0.6	b	c
4	2135	F	2102	3355	pivot stone	stone	22.7	14.5	5			c	e
4	2690	G	2024	3365	pivot stone	stone	25.4	18.4	14			c	e
4	2514	ENT	1678	2923	pivot stone	stone	24	1.9	1.8			c	e
4	2741	PS	2024	3153	vessel	pottery						b	c
4	2170	G		2651	pounder	stone	17.9	6.4		4.4		c	e
4	1997	F	2024	2462	quern	stone	13.6	1.2		2.5		b	c
4	2534	W	2423	2918	quern	stone	17.5	2.7	4.5			b	c
4	1707	G		2324	stopper	pottery				3	6.1	b	e
4	1567	G		1563	vessel	glass						b	c
4	2135	F	2102	3293	vessel	stone	4.5	0.5		3.7		b	c

AREA I, LEVEL 4.2 (4R)

AREA LEVEL	CONTEXT	CONTEXT CLASS	SUPRA-CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	FRAGMENT	CURATION
4R	2016	G		2691	awl	bone	0.8.4	1.5	0.9			b	e
4R	1987	G		2431	bead	pottery	5.0.7				2.6	c	c
4R	2100	G		2913	bead	pottery	2	2.3				c	c
4R	2169	G		2914	bead	terracotta	3.6		0.7		2.1	c	c
4R	2586	OD		3012	bead	shell	2				4	c	c
4R	2621	G		3404	bead	stone	1.7				0.7	c	c
4R	2961	G		3382	bead	stone			0.2		0.5	c	c
4R	1333	G		1391	bobbin	pottery	4.8	3.8				c	c
4R	2019	G		2453	bobbin	pottery				5.2	4	c	c
4R	2450	G	2402	2864	bobbin	pottery	5.3				4	b	c

AREA LEVEL	CONTEXT	CONTEXT CLASS	SUPRA-CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	FRAGMENT	CURATION
4R	1467	G		1554	bowl	stone	2.2	1.8	0.8			b	c
4R	2169	G		2906	bowl	pottery						c	c
4R	1382	G		2257	bracelet	glass	2.2		0.7			b	c
4R	1278	G		1355	crucible	pottery		2	2	2.3		b	c
4R	397	F		2819	cup	pottery			0.7		8.2	b	c
4R	2169	G		3098	cup	pottery			4	5.7	1.2	b	c
4R	2552	G		2942	cup	pottery	6.3		6		11	c	c
4R	2552	G		3054	cup	pottery	1.1	6.5	0.7			b	c
4R	2086	F	2119	2529	cylinder seal	stone	2				1.6	c	c
4R	397	F		2850	disc	pottery			1		6.9	b	e
4R	429	G		2847	disc	pottery			0.8		4	b	e
4R	429	G		3066	disc	pottery			0.9		4.7	c	e
4R	429	G		3073	disc	pottery			1.2		5.7	c	e
4R	1770	F	990	2710	disc	pottery			1		6.4	c	e
4R	1770	F	990	2798	disc	pottery			0.8		4.5	c	e
4R	1841	G		3211	disc	stone			1.9		4.8	c	e
4R	2016	G		2486	disc	pottery			1.5		5.6	c	e
4R	2016	G		2499	disc	pottery			1.3		5.2	c	e
4R	2016	G		2524	disc	pottery			6.5		45	c	e
4R	2016	G		2543	disc	pottery	5.8	5.2	5			c	e
4R	2016	G		2544	disc	Pottery			1.5		6.8	c	e
4R	2100	G		2964	disc	pottery			0.8		6.1	c	e
4R	2169	G		2689	disc	pottery	4.5	4	5			b	e
4R	2169	G		2893	disc	pottery			1		7.4	c	e
4R	2228	TW		2794	disc	pottery			0.8		4.5	b	e
4R	2964	F	2495	3314	disc	pottery			0.6		5.5	b	e
4R	2964	F	2495	3480	macehead	stone				3.8	5	c	c
4R	2621	G		3292	macehead?	stone						b	c
4R	1224	G		1390	misc	metal	0.9	6	4			b	na
4R	1807	G		2490	misc	metal	2.6	2.2	0.9			b	na
4R	1881	G		2742	misc	pottery			0.8		7.9	b	na
4R	2016	G		2493	misc	stone	3.8	1.5	5.5			c	na
4R	2016	G		2495	misc	pottery	11.6	7.3	1			b	na
4R	2019	G		2497	misc	clay				2.5	3.4	c	na
4R	2169	G		2680	misc	clay	4.9	4.4		3.4		b	na
4R	2621	G		3288	misc	metal	3.1	1.5	1.1			c	na
4R	2961	G		3381	misc	pottery	7.6	2.3	0.8			b	na
4R	1197	G		1360	nail	metal	2.3	2				c	na
4R	1504	GLA		2912	perforated stone	stone			5.8		2.2	b	e
4R	1504	GLA		2899	pin	metal	6.3	0.8				c	c
4R	1770	F	990	2709	pin	bone		0.7	4			b	c
4R	1841	G		2300	pin	metal	4		6			b	c
4R	2081	PL		2900	pin	metal	11	0.7				c	c
4R	2743	W	2495	3393	pin	bone	8.4				0.4	c	c
4R	2962	W	?	3390	pin	metal	4.5				0.7	b	c
4R	1431	G		1558	pin?	metal	4.5				4	b	c
4R	2964	F	2495	3296	pivot stone	stone				11.5	14	c	e
4R	1816	F	1859	2299	point	bone	4.8	0.9	5			b	e
4R	2621	G		3026	point	bone	6	1.3	0.8			b	e

AREA LEVEL	CONTEXT	CONTEXT CLASS	SUPRA-CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	FRAGMENT	CURATION
4R	2743	W	2495	3392	point	bone	13.7	2.4				c	e
4R	1841	G		2413	pounder	stone	18	3.7	3.2			c	e
4R	1504	GLA		2920	rubber	stone	16	12.8	4.2			b	c
4R	2961	G		3375	rubber	stone	1.5	0.7	5.3			b	c
4R	2961	G		3422	rubber	stone	23	15.1	5.1			c	c
4R	2964	F	2495	3330	rubber	stone	5.5	6.5	4			b	c
4R	384	G		2669	seal impression	pottery	1.8	1.4	0.6			c	e
4R	1605	G		1569	seal impression	pottery	.8.9			2.2	1.8	b	e
4R	1770	F	990	2718	seal impression	pottery	6.2	4.1		1.4		b	e
4R	1770	F	990	2472	spindle whorl	stone				1.1	2.7	c	c
4R	1197	G		1353	vessel	glass	6.5	5.3	3			b	c
4R	1197	G		1370	vessel	glass	1	0.8	1			b	c
4R	1225	W	2261	1492	vessel	glass	3	2	2			b	c
4R	2450	G	2402	2863	vessel?	pottery		3.4	5	4.7		b	c

AREA I, LEVEL 5

AREA LEVEL	CONTEXT	CONTEXT CLASS	SUPRA-CONTEXT	SF NUMBER	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	FRAGMENT	CURATION
5	3063	FL	3111	3357	bead	?	7		0.4		2.2	c	c
5	1563	F	1569	2470	bobbin	pottery				5.5	3.7	c	c
5	2041	F	2638	2465	bobbin	pottery				4.8	2.9	c	c
5	2177	F	2137	2674	bobbin	pottery				4.8	5.6	c	c
5	2177	F	2137	2675	bobbin	pottery				6.2	4.1	c	c
5	986	FL	2263	1143	disc	pottery	6.5	5.9	1.6			c	e
5	986	FL	2263	1144	disc	pottery	6.8	6.6	1.2			c	e
5	1279	F		1367	disc	pottery			1		4.5	c	e
5	1563	F	1569	2466	disc	pottery	7	5.8	1.2			b	e
5	1563	F	1569	2476	disc	pottery			1		7.3	c	e
5	1563	F	1569	2477	disc	pottery	6	5.5	1.1			c	e
5	1563	F	1569	2478	disc	pottery	6.1	5.7	9			c	e
5	1563	F	1569	2479	disc	pottery	5.4	3.7	8			b	e
5	1563	F	1569	2480	disc	pottery	5.6	3.5	1			b	e
5	1563	F	1569	2481	disc	pottery	7.1	6.2				c	e
5	1563	F	1569	2482	disc	pottery			1		6.6	c	e
5	1563	F	1569	2483	disc	pottery			1.1		6	c	e
5	1563	F	1569	2521	disc	pottery			0.7		4.4	c	e
5	1563	F	1569	2559	disc	pottery			0.5		4.1	c	e
5	2041	F	2638	2891	disc	pottery			0.6		4.2	c	e
5	2041	F	2638	2896	disc	pottery			0.9		6	c	e
5	2066	F	1564	2522	disc	pottery	6.2	5.7	1.2			c	e
5	2138	F	2137	2577	disc	pottery			0.7		5.4	c	e
5	2174	W?	2218	2667	disc	pottery			0.9		5.2	c	e
5	2177	F	2137	2670	disc	pottery	5.9	4.2	0.6			b	e
5	2177	F	2137	2687	disc	pottery	5.4	4.5	0.8			c	e

AREA LEVEL	CONTEXT	CONTEXT CLASS	SUPRA-CONTEXT	SF NUMBER	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	FRAGMENT	CURATION
5	2177	F	2137	2688	disc	pottery	4.5	4.5	0.8			c	e
5	2218	PL	1569	3075	disc	pottery			0.7		4.9	c	c
5	2511	F	2638	2894	disc	pottery			0.8		4.2	c	c
5	2512	F	2638	2895	disc	pottery			0.8		4.6	c	c
5	2512	F	2638	3040	disc	pottery			0.9		4.8	b	e
5	2512	F	2638	3071	disc	pottery			0.7		5.4	c	e
5	2512	F	2638	3387	disc	pottery			0.8		5	b	e
5	2066	F	1564	2488	figurine	clay	4.3	1.7		2.7		c	c
5	2073	F	1569	2530	figurine	clay	3.6	1.6		2.2		b	c
5	2177	F	2137	2699	figurine	pottery	3.1	1.3		2.2		b	c
5	2177	F	2137	2700	figurine	pottery	1.9	2.1		1.6		b	c
5	597	F	1569	590	globular jar	pottery				4.5	30	c	c
5	2101	F	1569	2558	globular jar	pottery					47	c	c
5	1563	F	1569	2484	grinder	stone	13.4	3.7		3.5		c	e
5	2512	F	2638	2907	lid	pottery			1.2		6.3	c	e
5	2512	F	2638	2937	lid	pottery			1		5	c	e
5	1573	F	1571	2585	misc	clay				7.2	8.9	c	na
5	3023	?	3111	3317	misc	terracotta	21	10.5	4.2			c	na
5	3047	ENT	3111	3391	misc	bone	9.7	1.9	1			b	na
5	3109	F	3111	3398	model wheel	pottery		3			7.2	b	c
5	3018	Ov	3111	3312	mortar?	stone	16.3	12.8		7.5		b	e
5	108	W	108	2429	perforated stone	stone	20.4	11.2		4.6		b	c
5	868	F	1569	1356	pin	bone	8.5	0.6	0.3			c	c
5	3076	W	3111	3371	pivot stone	stone	22.5	18..8	1.7			c	e
5	1279	F		1393	pivot stone	stone	19	13	3.5			c	e
5	2652	G	1569	3042	point	bone	4.5				0.4	b	e
5	1563	F	1569	2469	pounder	stone	9.7	9.2				c	e
5	3018	Ov	3111	3302	quern	stone	8	7.1	4.5			b	c
5	3018	Ov	3111	3305	quern	stone	8	10.5	3.6			b	c
5	3018	Ov	3111	3377	quern	stone			4.8		12.6	c	c
5	1606	G		1637	rattle	pottery		4.4		8.1		c	c
5	3018	Ov	3111	3306	rubber	stone	19.5	14	9.5			b	c
5	1928	F	1569	2275	vessel	glass	19	17	2.5			b	c
5	2512	F	2638	2967	vessel	stone				40		b	c
5	3021	OD	3111	3356	vessel	pottery	3	1.5	0.2			b	c
5	2616	FL	2638	2977	weight	stone	33.3	34	10			c	e

AREA III, LEVEL 4

AREA LEVEL	CONTEXT	CONTEXT CLASS	SUPRA CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	DIAMETER	HEIGHT	CONDITION	CURATION
4	216	COL	-	60	bead?	metal	0.8	0.3	0.3			b	c
4	1887	G	-	2409	beads (x3)	stone	2			0.7		c	c
4	243	G	-	933	bobbin	pottery	7	5.8	5.5			b	c
4	340	G	-	581	bowl	pottery				11	6.5	b	c

AREA LEVEL	CONTEXT	CONTEXT CLASS	SUPRA CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	DIAMETER	HEIGHT	CONDITION	CURATION
4	340	G	-	169	cup	pottery				11	6.2	c	c
4	233	G	-	100	perforated disc	stone	2.7	1.9	0.5			b	e
4	340	G	-	156	perforated disc	pottery				4.9	0.7	b	e
4	1922	G	-	2411	perforated disc	pottery	7.5	4.1	1			b	e
4	102	W	-	3282	perforated disc	pottery			0.7	5.2		c	e
4	235	G	-	88	perforated disc	stone	4.2	2	0.5			c	e
4	176	C	-	134	perforated disc	pottery	3.2	3.1	0.8			c	e
4	233	G	-	99	misc	stone	9.1	8.5	8.3			c	na
4	340	G	-	167.03	misc	clay	1.6	1.5	1.3			c	na
4	340	G	-	150.04	misc	clay	3.5	2.2	2.2			c	na
4	340	G	-	147	misc	pottery				6.6	1.9	b	na
4	340	G	-	150.01	misc	clay	3.4	2.7	1.8			c	na
4	340	G	-	150.03	misc	clay	3.5	2.9	2.1			c	na
4	340	G	-	163.01	misc	clay	3.4	2.4	2.3			c	na
4	340	G	-	163.02	misc	clay	3.7	3.1	2.6			c	na
4	340	G	-	163.03	misc	clay	2.9	2.9	1.8			c	na
4	340	G	-	167.01	misc	clay	2.5	2.1	1.2			c	na
4	340	G	-	167.02	misc	clay	1.8	1.7	1.5			c	na
4	367	DR	-	166	misc	clay	2.3	2.3	1.8			c	na
4	340	G	-	150.02	misc	clay	3.4	2.5	2			c	na
4	235	C	-	142	nail	metal	6.5	1.6	0.4			b	c
4	368	G	-	178	point	bone	4.6	0.8	0.6			b	e
4	3010	G	-	3303	quern	stone	13.3	5	9.5			b	c
4	1083	F	-	1374	rubber	stone	16	14			6	b	c
4	1922	G	-	2422	rubber	stone	20.2	11.6			4.5	b	c
4	102	W	-	3240	tube	metal	7			1.2		b	c
4	2551	G	-	2943	vessel	stone	46		4		20	b	c
4	102	W	-	3241	vessel	stone	7	7.3	0.9			b	c
4	2989	G	-	3290	vessel	pottery					5.5	c	c
4	274	W	310	2004	perforated disc	pottery	3.6	3.8	0.7			c	e
4	274	W	310	2005	perforated disc	pottery	5	4.8	0.8			c	e
4	162	W	310	3270	quern	stone	8.2	13.3	5.5			b	c
4	162	W	310	3255	rubber	stone	11.3	16.5	9.1			b	c
4	255	F	310	98	rubbing stone	stone	23.7	20	3.3			c	e
4	162	W	310	3350	weight?	stone	28.5	18	14.5			c	e
4	236	FO	349	160	perforated disc	pottery				0.9	6.1	c	e
4	236	FO	349	175	misc	clay	3.2	2.5	2.4			c	na
4	303	W	349	176	misc	clay	2.9	2.3	1.8			c	na
4	305	W	349	144	pivot stone	stone						c	e
4	447	F	516	551	bead?	stone	4.3			3.1		c	c
4	374	W	516	174	cup	pottery			0.3	12	7.4	b	c
4	343	W	516	161	grinder	stone	13.4	6.2	4.9			c	e
4	343	W	516	157	misc	clay	2.8	2.8	2.7			c	na
4	2374	F	516	2823	misc.	stone	32.2	8	5			c	na
4	2414	F	516	2815	pendant	stone			0.9		1.9	c	c
4	374	W	516	158	pounder	stone	5.9	5.5	5			c	e
4	408	W	516	172	rubber	stone	20	18.7	7.2			b	c
4	343	W	516	162	rubber	stone	23.3	16.6	4.9			c	c
4	343	W	516	195	rubber	stone	15.5	15.5	5.8			b	c

AREA LEVEL	CONTEXT	CONTEXT CLASS	SUPRA CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	DIAMETER	HEIGHT	CONDITION	CURATION
4	343	W	516	544	rubber	stone	17.5	14	7			b	c
4	342	OD	516	154	thumb pot	pottery				7.8	5.4	b	c
4	1042	F	1098	2022	perforated disc	pottery	4.3	2.4	1			b	e
4	2613	F	1908	3082	bowl	pottery						c	c
4	2037	W	1980	2557	perforated disc	pottery	6.2	5.6	0.8			c	e
4	2585	F	1980	3152	pot	pottery						c	c
4	2372	ENT	1980	2830	rubber?	stone	10.5	9.5	5			b	c
4	2547	F	1980	3109	seal impression?	clay						b	e
4	2585	F	1980	3104	seal impression?	clay						b	e
4	2740	F	2775	3443	misc	clay	7.3	6.5	2.5			b	na
4	2951	F	2775	3245	pot	pottery						c	c
4	2947	OD	2776	3274	perforated disc	pottery			0.9	7		c	e
4	2579	F	2776	2944	pin	bone	5.2	0.8				b	c
4	2764	OD	2777	3243	perforated disc	pottery			0.9	5.5		c	e
4	2936	W	2936	3228	bobbin	pottery				4.7	5	b	c
4	2855	DF	2982	3171	bead	terracotta	5.7			2.6		c	c
4	2855	DF	2982	3173	bobbin	pottery				3.4	3.5	c	c
4	2855	DF	2982	3181	cup	pottery			0.6	10.2	7.6	c	c
4	2855	DF	2982	3212	perforated disc	pottery			1.1	7.5		c	e
4	2855	DF	2982	3165	perforated disc	pottery			1.1	6.2		c	e
4	2855	DF	2982	3161	perforated disc	pottery			0.7	5.1		c	e
4	2854	DF	2982	3167	perforated disc	pottery			0.9	6.1		b	e
4	2855	DF	2982	3172	figurine?	terracotta	5	3.8	1.5			b	c
4	2855	DF	2982	3477	perforated sherd	pottery	3	2.5	0.6			b	na
4	2855	DF	2982	3199	pounder	stone				7		c	e
4	2855	DF	2982	3269	quern	stone	4	4.2	2.4			b	c
4	2855	DF	2982	3160	rattle?	terracotta	8.8			5.4		b	c
4	2854	DF	2982	3265	rubber	stone	5	5	3.5			b	c
4	2855	DF	2982	3179	seal impression	clay		7	3.9		4.9	c	e
4	2855	DF	2982	3175	sealing?	clay	7.3	5.5			6.5	c	e
4	2938	DF	2983	3229	bobbin	pottery				3.2	4.9	c	c
4	2938	DF	2983	3233	perforated disc	pottery			0.6	2.5		b	e
4	2938	DF	2983	3156	perforated disc	pottery			0.8	5.2		c	e
4	2938	DF	2983	3158	perforated disc	pottery			1	6		c	e
4	2938	DF	2983	3174	figurine?	terracotta	3.7			1.7		b	c
4	2938	DF	2983	3157	modified sherd	pottery			0.8	5		c	e
4	2938	DF	2983	3159	modified sherd	pottery			1.2	4.9	3.7	c	e
4	2986	Fl	2983	3298	quern	stone	15	10	4.4			b	c
4	2986	Fl	2983	3300	quern	stone	11.3	12.3	4.2			b	c
4	2938	DF	2983	3253	quern	stone	6	5	4.5			b	c
4	2986	Fl	2983	3297	quern	stone	11.2	8.8	7.2			b	c
4	2986	Fl	2983	3299	rubber	stone	12.5	11	5.2			c	c
4	2938	DF	2983	3154	seal impression	clay	3.2	5.6	0.6			b	e

AREA III, LEVEL 7

AREA LEVEL	CONTEXT	CONTEXT CLASS	SUPRA CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
7	1458	W		2191	basin	stone	27	23			18	b	c
7	1378	OD		1552	jar	pottery				1.2	5.8	c	c
7	1386	G		1488	protome	pottery	4.7	5.3	2.8			b	c
7	1208	OD		1416	spindle whorl	stone				11	2.4	c	c
7	549	F	985	568	perforated disc	pottery	5.9	3.1	1.2			b	e
7	524	W	985	649	mortar	stone	32	28	22			b	e
7	542	W	985	1405	pounder	stone				5.3		c	e
7	1003	OV	985	1278	rubber	stone	18	22			5.5	b	c
7	542	W	985	1334	whetstone?	stone	14	2.4	2.6			c	e
7	1277	PS	1006	1363	bowl	pottery						b	c
7	1276	PS	1006	1362	bowl	pottery						b	c
7	1007	F	1006	898	open vessel	pottery				5.4	12	b	c
7	1229	OD	1006	1361	spindle whorl	bone				1.8	3.38	c	c
7	1006	B	1006	1673	stemmed cup	pottery						b	c
7	1229	OD	1006	2456	tool	antler	5.8		1			b	e
7	1007	F	1006	1357	whetstone	stone	10.4	2.7	1			c	e
7	544	F	1167	571	misc	pottery	2.5	1.3	1.3			b	na
7	548	F	1167	921	nail	metal	7.9		0.3			b	c
7	563	Fl	1167	645	pivot stone	stone	16	13	5			b	e
7	1357	PF	1354	1498	bowl	stone	4	4.2	1.3			b	c
7	1505	PF	1354	1514	misc	pottery	3.8	1.8			6	b	na
7	1304	SFW	2258	1516	perforated disc	pottery	7.3	6.8	6			c	e

AREA III, LEVEL 8

AREA LEVEL	CONTEXT	CONTEXT CLASS	SUPRA CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	DIAMETER	HEIGHT	CONDITION	CURATION
8	1596	G		1568	bead	stone?			0.4	1		c	c
8	2303	G		2728	pivot stone	stone	23	20.5	17.5			c	e
8	2303	G		2727	pivot stone	stone	19	16	7.5			c	e
8	1494	PF	1453	1551	perforated disc	pottery	5.8	5.4	0.6			c	e
8	1494	PF	1453	2459	tool	antler	13.4		2.4			b	e
8	1494	PF	1453	2458	tool	antler	10.1		1.9			b	e
8	1764	PF	1739	2369	bobbin	pottery				3.4	5.4	c	c
8	1745	PF	1739	2354	bobbin	pottery				4.4	3.3	b	c
8	1821	PF	1739	2295	perforated disc	pottery			0.8	3.7		b	e
8	1821	PF	1739	2296	scraper	pottery				8.5	1.8	c	e
8	1792	PF	1795	2368	bobbin	pottery				3.1	4.6	b	c
8	1792	PF	1795	2370	grinder?	stone	5.3	3.7			3.2	c	e
8	1823	PF	1825	2371	pedestal jar	pottery				15.4	15	b	c

AREA III, LEVEL 9

AREA LEVEL	CONTEXT	CONTEXT CLASS	SUPRA CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
9	1416	G		2353	bobbin	pottery				3.5	5	b	c
9	1416	G		1487	bobbin	pottery	48	50				b	c
9	1475	G		1628	cup	pottery				3.8	8	b	c
9	1476	G		2365	perforated disc	pottery	3.6	3.3	0.6			b	e
9	1898	G		2418	perforated disc	pottery	3.2	1.9	0.7			b	e
9	1416	G		1789	perforated disc	pottery			0.9	6.5		b	e
9	2308	G		2774	grinder	stone			3.3	7.2		c	e
9	1416	G		1432	pin	bone	6.6	0.7	0.5			b	c
9	1416	G		2457	tool	bone	5.7		1.1			b	e
9	1525	Pv	2242	2428	perforated disc	pottery	4.4	3.1	0.7			b	e
9	1525	Pv	2242	2406	rubber	stone	14.9	13.4			5.7	b	c

AREA III, LEVEL 10

AREA LEVEL	CONTEXT	CONTEXT CLASS	SUPRA CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
10	1920	G		2492	awl/punch	metal	5.9				1.2	c	e
10	1920	G		2412	bobbin	pottery				6	4.6	c	c
10	1920	G		2416	bobbin	pottery	3.5	2.7		3.4		b	c
10	1951	G		2417	perforated disc	pottery	5.5	5.1	1			b	e
10	1920	G		3031	scraper	pottery	4.5	2.4	1.4			c	e
10	1921	PF	1924	2991	scraper	pottery	2.9	1.9	1.2			c	e
10	2009	PF	1952	2455	perforated disc	pottery	9.6	5.7	2.7			b	e
10	1953	PF	1952	2427	perforated disc	pottery			0.8		3.9	c	e
10	1953	PF	1952	2494	misc	stone	3.6	2.4	1			b	na
10	1953	PF	1952	2989	scraper	pottery	3.6	3	0.9			c	e
10	2009	PF	1952	3058	vessel	stone			0.7	5.3	11	b	c
10	2009	PF	1952	2439	vessel	stone	4.2	4.1	0.8		13	b	c
10	2004	PF	2003	2440	bobbin	pottery				5	4.1	c	c
10	2028	PF	2027	2467	perforated disc	pottery	5.7	5.3	0.9			b	e
10	2028	PF	2027	2461	perforated disc	pottery	4.3	3.9	1.1			b	e

AREA III, LEVEL 11

AREA LEVEL	CONTEXT	CONTEXT CLASS	SUPRA CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
11	2369	G		3050	bead	stone			1		2	c	c
11	2064	G		2545	bead	stone			1		1	c	c

AREA LEVEL	CONTEXT	CONTEXT CLASS	SUPRA CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
11	2012	G		2590	bead	stone			1		2	c	c
11	2094	OD		2547	bead	stone			2		5	c	c
11	2130	G		2607	beads (x3)	stone						c	c
11	2085	G		2546	beads (x4)	stone			2		4	c	c
11	2395	G		3051	beads (x5)	stone						c	c
11	1979	G		2434	bowl	pottery				5.9	11	c	c
11	2035	G		2468	bowl	pottery				5.7	11.9	b	c
11	2062	OD		2660	bowl	pottery				8	15.5	c	c
11	2380	G		2793	bowl?	stone	8	4	2			b	c
11	2085	G		2682	burial	bone						c	c
11	2380	G		2814	perforated disc	pottery			0.6		2.3	b	e
11	1979	G		2435	perforated disc	pottery			0.7		3.9	b	e
11	1979	G		2436	perforated disc	pottery	5.2	3	0.8			b	e
11	2094	OD		2549	perforated disc	stone			0.9		4.9	c	e
11	2094	OD		2542	perforated disc	pottery					6.6	c	e
11	2012	G		2604	misc	pottery				1.8		c	na
11	2035	G		2528	misc	metal	5.3		0.3			b	na
11	2085	G		2644	misc	metal	1.2	0.8	0.1			b	na
11	2366	G		2795	polisher?	stone	8.2	4.5	1.5			c	e
11	2130	G		2635	pounder	stone	20.5	8.4	5.5			c	e
11	2085	G		2650	pounder	stone	13.5	7.9	65.			c	e
11	2392	G		2844	quern	stone						b	c
11	2035	G		2496	scraper	pottery	10.3	7	1.6			b	e
11	2064	G		3030	scraper	pottery	4	2.9	1.3			c	e
11	2035	G		3080	scraper	pottery	6.5	1.7	2.3			c	e
11	2035	G		2526	scraper	pottery	2.7	2.1				c	e
11	2369	G		2817	scraper ?	pottery	30	2.5	0.8			c	e
11	2094	OD		2550	seal impression	clay	2.3	13	9			b	e
11	2380	G		3115	seal impression?	clay						c	e
11	2369	G		2999	seal impression?	clay						c	e
11	2394	G		2858	spindle whorl	stone				1	3.7	c	c
11	2084	Fl?		2539	stopper	clay				5	13	b	e
11	2085	G		2605	stopper	pottery	9.5	8.4	6.5			c	e
11	2085	G		2647	stopper	pottery	4.5	4.2	1.9			b	e
11	2094	OD		2569	stopper?	clay				2.8	4.9	c	e
11	2369	G		2868	stopper?	pottery				4.6	10.7	c	e
11	2082	G		2606	stopper?	stone?				4.5	8.4	c	e
11	2365	G		2804	vessel	stone	3.2	4	0.7			b	c
11	2085	G		2570	vessel	stone	6.5	4.6	1.1			b	c
11	2393	OD		2818	vessel?	pottery			4.5			b	c
11	2095	PS	2094	2659	bowl	pottery				7.5	15	c	c
11	2095	PS	2094	2658	bowl	pottery				8	16	c	c
11	2095	PS	2094	2657	bowl	pottery				7.0	15.5	c	c
11	2095	PS	2094	2656	bowl	pottery				8.2	13.8	c	c
11	2095	PS	2094	2655	bowl	pottery				8.3	16	c	c
11	2095	PS	2094	2683	jar	pottery					14	c	c
11	2379	PF	2378	2787	pendant	stone				1.2	0.5	c	c

AREA III, LEVEL 12

AREA LEVEL	CONTEXT	CONTEXT CLASS	SUPRA CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
12	2092	Fl		2665	bead	stone					0.2	c	c
12	2092	Fl		2639	bead	stone				1.5	2.5	c	c
12	2092	Fl		2685	bead	stone	2			1.5		c	c
12	2092	Fl		2701	bead?	stone?	1	1				b	c
12	2192	Fl		2694	beads (x4)	stone						c	c
12	2092	Fl		2690	misc	stone	2.2	2.1	1			b	na
12	2092	Fl		2608	misc	stone	2.6	2.2	1			b	na
12	2092	Fl		2671	misc	stone	6.7	4.6	4.4			b	na
12	2092	Fl		2643	point	bone	3.2				2.5	b	e
12	2092	Fl		2568	rubber	stone	13	9.5	8.7			b	c
12	2092	Fl		2609	sherd	pottery	3.5	2.7	1.1			b	na
12	2162	PS	2092	2661	bowl	pottery				9	15.5	c	c
12	2162	PS	2092	2662	bowl	pottery				8.3	15	c	c
12	2162	PS	2092	2663	bowl	pottery				8	14.5	c	c
12	2398	Fl	2092	3110	seal impression?	clay						c	e
12	2165	T	2165	2681	burial	bone						c	na
12	2179	T	2165	2698	misc	pottery	3.4	2.3	0.6			b	na
12	2396	PS	2185	2888	bowl	pottery				7	24	c	c
12	2396.17	PS	2185	2885	bowl	pottery				9	13	c	c
12	2396.9	PS	2185	2877	bowl	pottery				9	16	c	c
12	2396.8	PS	2185	2876	bowl	pottery				7.5	18	c	c
12	2396.7	PS	2185	2875	bowl	pottery				8.5	18	c	c
12	2396.6	PS	2185	2874	bowl	pottery				8.5	18	c	c
12	2396.5	PS	2185	2873	bowl	pottery					16	c	c
12	2396.4	PS	2185	2872	bowl	pottery					20	c	c
12	2396.3	PS	2185	2871	bowl	pottery				6.5	16	c	c
12	2396.2	PS	2185	2870	bowl	pottery				8	14.5	c	c
12	2396.18	PS	2185	2886	bowl	pottery				8	15	c	c
12	2396.16	PS	2185	2884	bowl	pottery				8.8	15.5	c	c
12	2396.11	PS	2185	2879	bowl	pottery				8.5	20	c	c
12	2396.15	PS	2185	2883	bowl	pottery				8	16	c	c
12	2396.12	PS	2185	2880	bowl	pottery				8.5	12	c	c
12	2396.13	PS	2185	2881	bowl	pottery				8	14.5	c	c
12	2396.1	PS	2185	2869	bowl	pottery					11	c	c
12	2396.14	PS	2185	2882	bowl	pottery				9.3	24	c	c
12	2396.19	PS	2185	2887	bowl	pottery				7.8	22	c	c
12	2396	PS	2185	2848	perforated disc	pottery			2		6.3	b	e
12	2396	PS	2185	2889	perforated disc	pottery				0.7	4.6	c	e
12	2197	W	2185	3091	pivot stone	stone	32	23.5	12.5			c	e
12	2193	Fl	2192	2668	bead	stone					1.5	c	c
12	2438	Fl	2192	2969	bead	stone				0.2	0.4	c	c
12	2438	Fl	2192	2857	spindle whorl	pottery			4.8	1.7		c	c
12	2220	Pv	2196	2843	quern	stone	24.5	19	4.5			c	c
12	2220	Pv	2196	2839	quern	stone	23	17	5			c	c

AREA LEVEL	CONTEXT	CONTEXT CLASS	SUPRA CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
12	2220	Pv	2196	2840	rubber	stone	11	19	9			b	c
12	2220	Pv	2196	2867	weight	stone	18.5	13	6			c	e

AREA III, LEVEL 13/14

AREA LEVEL	CONTEXT	CONTEXT CLASS	SUPRA CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
13/14	2681	G	-	3047	bead	stone			0.3		1.3	c	c
13/14	2681	G	-	3048	bead	stone	1.3	1.3	0.2			c	c
13/14	2508	G	-	3079	beads (x2)	stone						c	c
13/14	2642	OD?	-	3097	perforated disc	pottery				1	6.9	b	e
13/14	2641	G	-	3056	perforated disc	stone				0.5	4.5	b	e
13/14	2640	G	-	3074	perforated disc	stone				1	5.2	c	e
13/14	2684	PF	-	2684	misc	stone	9.2	5.2	3.1			b	na
13/14	2237	G	-	2902	misc	stone				2.6		c	na
13/14	2484	G	-	3111	seal impression?	clay						c	e
13/14	2609	G	-	3033	vessel	stone			1.2		4.2	b	c
13/14	2480	PF	2195	3025	bead	shell				0.2	0.6	c	c
13/14	2200	Pv	2195	2695	bead	stone					0.2	c	c
13/14	2200	F	2195	2686	bead	stone				1	4.5	c	c
13/14	2194	F	2195	2403	misc	?	1	0.6	0.5			b	na
13/14	2482	PF	2485	2990	bead	stone				0.1	0.4	c	c
13/14	2483	PF	2485	2892	perforated disc	pottery				1.2	6.8	b	e
13/14	2509	PF	2485	2901	inlay?	stone	2	1.3	0.4			c	c
13/14	2509	PF	2485	3112	seal impression?	clay						c	e
13/14	2482	PF	2485	3105	seal impression?	clay						c	e
13/14	2510	PF	2485	3114	seal impression?	clay						c	e
13/14	2644	PF	2645	3100	bead	stone					0.2	c	c
13/14	2644	PF	2645	3101	bead	stone				1	0.4	c	c
13/14	2644	PF	2645	3113	seal impression?	clay						c	e
13/14	2605	PF	2680	3052	bead	stone				0.1	0.2	c	c
13/14	3104	PF	3090	3399	jar	pottery						c	c

AREA IV, LEVEL 4

AREA LEVEL	UNIT	UNIT CLASS	SUPRA UNIT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
4	1096	W	-	1790	perforated disc?	pottery	6.1	4.1	1.3			b	e

AREA LEVEL	UNIT	UNIT CLASS	SUPRA UNIT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
4	1023	G	-	849.01	pin	metal						c	c
4	1023	G	-	849.02	pin (joins 849.01)	metal						c	c
4.1	1914	G	-	2538	bobbin	pottery				4	4	b	c
4.1	2293	G	-	3088	cupped stone	stone	14.5	16	6.8			b	e
4.1	2278	BE	-	3089	cupped stone	stone	14	11	8.5			b	e
4.1	2187	PF	-	2649	perforated disc	pottery	4.9	4.3	0.8			c	e
4.1	2429	G	-	2903	perforated disc	pottery				0.9	4	b	e
4.1	2429	G	-	2865	perforated disc	pottery				1	4	c	e
4.1	1930	G	-	2578	perforated disc	pottery				1	7.1	b	e
4.1	2189	G	-	2692	quern	stone	16	11.3	6.3			b	c
4.1	2429	G	-	2921	quern	stone	12.8	17.6	4			b	c
4.1	2429	G	-	2841	quern	stone	11	6	6.5			b	c
4.1	1752	FL	-	2346	rubber	stone	14.4	12.2	5.1			b	c
4.1	1327	G	-	1420	rubber	stone	21	15	9			c	c
4.1	1930	G	-	2485	stopper	pottery				3	4.7	c	e
4.1	1287	Fl	1000	1485	perforated disc	pottery				1	6.4	c	e
4.1	1078	W	1000	1373	perforated stone	stone	12	14	6			b	e
4.1	1283	W	1000	1423	pivot stone	stone	14	6	6			b	e
4.1	1269	W	1000	1575.2	pivot stone	stone	27	25	14			b	e
4.1	1078	W	1000	1377	pivot stone	stone	13	6	7			b	e
4.1	1269	W	1000	1575.1	pivot stone	stone	30	28	14			b	e
4.1	1248	Pv	1000	1375	pivot stone	stone	21	21	9			c	e
4.1	1269	W	1000	1386	quern	stone	32	24	10			c	c
4.1	1248	Pv	1000	1577	quern	stone	19	21	4			b	c
4.1	1248	Pv	1000	1421	quern	stone	32	23	9			b	c
4.1	1284	W	1000	1417	quern	stone	19	11	5			b	c
4.1	1284	W	1000	1418	quern	stone	19	21	5			b	c
4.1	1269	W	1000	1581	quern?	stone	16	11	8			b	c
4.1	1269	W	1000	2348	rubber	stone	18.9	129	11			b	c
4.1	1269	W	1000	1578	rubber	stone	16	18	8			b	c
4.1	1284	W	1000	1715	rubber	stone	16	14	7			b	c
4.1	1287	Fl	1000	1424	rubber	stone	21	14	6			b	c
4.1	1665	W	1092	2360	pivot stone	stone	25	22.5	11			c	c
4.1	1665	W	1092	2589	pivot stone	stone	20	20	8.5.			c	e
4.1	1092	Pw	1092	2636	pivot stone	stone	27.5	16.5	12.2			c	e
4.1	1092	Pw	1092	2601	pounder	stone	12.5	4.9	4.6			b	e
4.1	1092	Pw	1092	2600	quern	stone	9	6	3.1			b	c
4.1	1736	Pw	1092	2442	quern	stone	23.6	22	6.4			b	c
4.1	1092	Pw	1092	2638	quern	stone	18.5	17.5	4.5			b	c
4.1	1092	Pw	1092	2637	quern	stone	14.2	9.6	4			b	c
4.1	1092	Pw	1092	2622	quern	stone	11.7	8.5	4.4			b	c
4.1	1092	Pw	1092	2621	quern	stone	9.9	8.6	5			b	c
4.1	1092	Pw	1092	2619	quern	stone	40.2	20.5	5			b	c
4.1	1092	Pw	1092	2616	quern	stone	14.7	10.5	7			b	c
4.1	1092	Pw	1092	2615	quern	stone	14	12.5	8.5			b	c
4.1	1736	Pw	1092	2444	rubber	stone	21.7	13.2	6			b	c
4.1	1092	Pw	1092	2595	rubber	stone	15.5	11.2	8.5			b	c
4.1	1092	Pw	1092	2593	rubber	stone	12.8	17.5	6.5			b	c
4.1	1721	Pw	1092	2316	rubber	stone	14.1	13.5	5.8			b	c
4.1	1092	Pw	1092	2623	rubber	stone	15.4	14.7	8			b	c

AREA LEVEL	UNIT	UNIT CLASS	SUPRA UNIT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
4.1	1092	Pw	1092	2624	rubber	stone	14.2	16.7	7.7			b	c
4.1	1092	Pw	1092	2620	rubber	stone	17.5	12.7	8.3			b	c
4.1	1092	Pw	1092	2618	rubber	stone	12.5	17	5.2			b	c
4.1	1092	Pw	1092	2617	rubber	stone	12.3	13.7	5.3			b	c
4.1	1093	W	2188	2693	brick	pottery	8.8	8.2	4.4			b	na
4.1	1093	W	2188	2764	misc	stone	11	5.7	4.2			b	na
4.1	1093	W	2188	2372	pivot stone	stone	14	11.9	7.4			c	e
4.1	1093	W	2188	2743	pounder	stone	12.5	6.3	5.5			b	e
4.1	1093	W	2188	2736	quern	stone	15	15	8.5			b	c
4.1	1093	W	2188	2627	quern	stone	40.5	29	11.5			b	c
4.1	2060	W	2188	2738	quern	stone	9	18	5.7			b	c
4.1	1093	W	2188	2822	rubber	stone	16.5	14	5			b	c
4.1	1948	W	2188	2752	stopper	pottery				3.3	4.8	b	e
4.1	1265	Fl	1000	1419	quern?	stone	16	9	5			b	c
4.1	1265	W	1000	1579	quern?	stone	17	9	4.5			b	c
4.1	1265	Fl	1000	1422	rubber	stone	24	16	5			b	c
4.2	910	CO		1258	bead?	shell				1.7	1.1	b	c
4.2	1766	OD		2463	pounder	stone	9.5	7.6				c	e
4.2	1894	F		2588	quern	stone	18	25	5.8			b	c
4.2	1012	CO	1000	899	closed vessel	pottery				1.8	10.7	b	c
4.2	923	CO	1000	1147	perforated disc	pottery	7.6	6.3	1.3			c	e
4.2	1074	W	1000	1261	grinder	stone	18	8	7.5			c	e
4.2	926	CO	1000	1133	loomweight	pottery	5.1	4.7	2.1			c	e
4.2	953	CO	1000	1266	mortar	stone	23	17.5	23.5			b	e
4.2	950	W	1000	1267	mortar	stone	18	10	18.5			b	e
4.2	1191	F	1000	2049	mortar	stone						c	e
4.2	1079	W	1000	1265	perforated stone	stone	15.5	9	5			b	e
4.2	926	CO	1000	1117	pin	metal						b	c
4.2	1012	CO	1000	1251	pin	metal						c	c
4.2	1260	W	1000	2351	pivot stone	stone	217	14.7			92	c	e
4.2	926	CO	1000	1136	pounder	stone	6.5	5.3	4.1			c	e
4.2	1079	W	1000	1270	quern	stone	21	17	6			b	c
4.2	860	W	1000	1269	quern	stone	27.5	16.5	8.5			b	c
4.2	860	W	1000	1271	quern	stone	26	24	8			b	c
4.2	950	W	1000	1388	quern	stone	31	26	9			b	c
4.2	950	W	1000	1275	quern	stone	25	17	5.5			b	c
4.2	1076	W	1000	1372	quern	stone	28	14	10			c	c
4.2	1191	F	1000	1273	quern	stone	20	10.5	5.5			b	c
4.2	860	W	1000	1274	quern	stone	26	22	9			b	c
4.2	1260	W	1000	1605	quern	stone						b	c
4.2	1079	W	1000	1280	rubber	stone	11.5	14	6			b	c
4.2	860	W	1000	1281	rubber	stone	17	9	8			b	c
4.2	860	W	1000	1282	rubber	stone	20	14	8			b	c
4.2	1191	F	1000	1283	rubber	stone	20	17.5	9			b	c
4.2	1085	W	1000	1383	rubber	stone	13	13	7			b	c
4.2	860	W	1000	1380	rubber	stone	11	14	7			b	c
4.2	860	W	1000	1384	rubber	stone	25	14	5			c	c
4.2	1074	W	1000	1379	rubber?	stone	9	13	6			b	c
4.2	1080	Fl	1000	1387	pivot stone	stone	20	18	5			c	e
4.2	1530	W	1000	1580	quern?	stone	28	16	9			b	c

AREA LEVEL	UNIT	UNIT CLASS	SUPRA UNIT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
4.2	1262	PH	1258	1385	quern?	stone	21	16	5			b	c
4.2	1903	W	1870	2729	pivot stone	stone	21	15.5	14.5			c	e
4.2	1903	W	1870	2730	pivot stone	stone	21.5	17.5	8.5			c	e
4.2	1903	W	1870	2731	quern	stone	48	36	3.1			b?	c
4.2	1860	F	1870	2446	rubber	stone	10.3	9.1	5.2			b	c
4.2	1903	W	1870	2426	rubber	stone	11.1	15	6.4			b	c
4.2	1903	W	1870	2702	pivot stone	stone	23	16.5	12.5			c	e
4.2	1037	F	1000	1727	cooking pot	pottery						b	c
4.2	826	F	1000	1276	rubber	stone	33	15.5	6.5			b	c
4.2	1055	F	1092	1277	rubber	stone	16	14.5	5.5			b	c
4.3	1664	F		2361	brick	-	24.8	10.4	5.1			b	na
4.3	1664	F		2241	pedestal cup	pottery				6.1	9.4	b	c
4.3	1780	F		2376	quern	stone	12.8	12.6	4.6			b	c
4.3	1780	F		2359	rubber	stone	13.8	12.4	7.4			b	c
4.3	1702	F	1775	2358	pounder	stone	16.9	7.2	6.2			c	e
4.3	1862	Fl	1775	2511	rubber	stone	6.6	12.3	4.9			b	c
4?	1447	G		1788	perforated disc	pottery				5	5.3	b	e
4?	2032	FL		2513	misc	stone	14.1	10.7	13			b	na
4?	2032	FL		2515	rubber	stone	10.3	10.7	6.8			b	c
4?	1785	FL		2613	rubber	stone	16.5	15	6.5			b	c
4?	2166	PF		2648	seal impression	pottery	4.3	1.3				b	e

AREA IV, LEVEL 5

AREA LEVEL	CONTEXT	CONTEXT CLASS	SUPRA-CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
5.1	1991	G		2437	bobbin	pottery	4.7	4			4.9	b	c
5.1	2597	F		3067	perforated disc	pottery				0.5	5	c	e
5.1	2597	F		3036	perforated disc	pottery				0.8	4.2	b	e
5.1	2597	F		2965	perforated disc	pottery				0.7	5.5	c	e
5.1	1774	G		2297	perforated disc	pottery				0.7	4.6	b	e
5.1	2576	G		2936	perforated disc	pottery				0.8	6	b	e
5.1	1790	G		2345	pin	metal	2.1				0.2	b	c
5.1	2570	W		2924	pivot stone	stone	20.5	19	10			c	e
5.1	1758	W		2983	quern	stone	29	32.7	13			b	c
5.1	1758	W		2357	quern	stone	35.5	30.3	9.5			c	c
5.1	1758	W		2982	rubber	stone	24.2	15	5			c	c
5.1	1915	G		2447	rubber	stone	20	13.2	6.3			b	c
5.1	1758	W		2355	rubber	stone	13.5	15	9			b	c
5.1	2634	F		3059	stopper	pottery				1.9	2.9	b	e
5.1	2575	F	2593	2945	bead	bone	3.2				.	c	c
5.1	2575	F	2593	2949	perforated disc	pottery				1.1	5.3	c	e
5.1	2575	F	2593	3028	misc	metal						b	na
5.1	2572	F	2629	2938	bobbin	pottery	4.7				4.5	c	c
5.1	2596	F	2629	3068	perforated disc	pottery				0.5	3.9	c	e

AREA LEVEL	CONTEXT	CONTEXT CLASS	SUPRA-CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
5.1	2596	F	2629	3072	perforated disc	pottery				0.9	4	c	e
5.1	2596	F	2629	3069	perforated disc	pottery				1.2	6	c	e
5.1	2572	F	2629	2935	perforated disc	pottery				1	4.7	c	e
5.1	2572	F	2629	2931	perforated disc	pottery				1	4.2	c	e
5.1	2572	F	2629	2930	perforated disc	pottery				1	5.9	c	e
5.1	2572	F	2629	2950	perforated disc	pottery				0.7	6.3	b	e
5.1	2596	F	2629	3034	perforated disc	pottery				1.2	5	b	e
5.1	1964	W	2629	2464	misc	stone	22	11	14.2			b	na
5.1	2572	F	2629	2941	pendant?	pottery	2.5	1.9	0.4			c	c
5.1	2596	F	2629	2968	pin	metal	65				0.4	b	c
5.1	2596	F	2629	3063	pin	metal	3	2	0.5			b	c
5.1	1964	W	2629	2994	pivot stone	stone	28	25.5	22			c	e
5.1	1757	W	2629	2975	pounder	stone	13.2	7	5.3			c	e
5.1	1757	W	2629	2979	quern	stone	18.5	18	11.5			b	c
5.1	2600	F	2629	2972	quern?	stone	13.5	20.5	7.6			b	c
5.1	1757	W	2629	2980	rubber	stone	17.5	12.5	6.5			b	c
5.1	1757	W	2629	2981	rubber	stone	24.5	15	5.5			b	c
5.1	2591	Ent	2630	2995	pivot stone	stone	32	21.5	16			c	e
5.2	1714	G		2342	cupped stone	stone	5.6	4.6	3.7			c	e
5.2	1697	G		2303	perforated disc	pottery				0.8	6.1	b	e
5.2	2294	Fl		2769	perforated disc	pottery				1.2	7.3	c	e
5.2	1677	G		2302	perforated disc	pottery				0.5	5.4	b	e
5.2	1695	G		2304	figurine	pottery	5.5	3.1	1.9			b	c
5.2	2288	SW		3090	pivot stone	stone	18	16	8			c	e
5.2	1697	G		2319	pivot stone	stone				6.2	15.8	b	e
5.2	1796	G		2405	rubber	stone	10.3	16.0			7.3	b	c
5.2	1677	G		2278	rubber	stone	20.4	14.7			14.8	c	c
5.2	1714	G		2338	spindle whorl	pottery				1	4.7	b	c
5.2	2283	F	2436	2909	perforated disc	pottery				0.9	4.6	c	e
5.2	2283	F	2436	2915	seal impression	pottery	7.1	6.3	1.3			b	e
5.2	2351	H	2628	3094	quern?	stone	18	15	10			b	c
5.2	2351	H	2628	2828	rubber	stone	17.5	11.5	9.5			b	c
5.2	2387	F	2632	3024	bead	stone			0.2	3		c	c
5.2	2387	F	2632	3049	bead	stone			0.2	3		c	c
5.2	2387	F	2632	2854	perforated disc	pottery				0.7	5.5	b	e
5.2	2387	F	2632	2853	perforated disc	pottery				1.4	5.2	b	e
5.2	2387	F	2632	2852	perforated disc	pottery				0.8	4.2	b	e
5.2	2387	F	2632	2855	perforated disc	pottery				1.2	6.6	c	e
5.2	2387	F	2632	2811	perforated disc	pottery				0.6	2.5	b	e
5.2	2387	F	2632	2851	perforated disc	pottery	40	30		0.8	7.6	b	e
5.2	2387	F	2632	2856	perforated disc	pottery	51	27		0.7	9	b	e
5.2	2387	F	2632	2810	perforated disc	pottery				0.7	3.5	b	e
5.2	2383	Fl?	2632	2806	perforated disc	pottery				0.7	5	b	e
5.2	2433	F	2632	2897	perforated disc	pottery				0.9	6	c	e
5.2	2383	Fl?	2632	2797	perforated disc	pottery				1	4	c	e
5.2	2387	F	2632	2807	perforated disc	pottery				0.9	6	b	e
5.2	2334	Fl	2632	2812	perforated disc?	pottery				0.8	4.2	b	e
5.2	2387	F	2632	2809	perforated disc?	pottery				1.1	3.5	b	e
5.2	2383	Fl?	2632	2846	perforated disc?	pottery				3	5.7	b	e

AREA LEVEL	CONTEXT	CONTEXT CLASS	SUPRA-CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
5.2	2385	F	2632	2813	perforated disc?	pottery				0.9	4.9	b	e
5.2	2387	F	2632	2808	perforated disc?	pottery				0.8	4.1	b	e
5.2	2384	F	2632	2790	lid	pottery				1.2	7	c	c
5.2	2387	F	2632	2860	misc	pottery	4	2	0.6			b	na
5.2	2334	Fl	2632	2861	perforated stone	stone				2.1	4.6	c	e
5.2	2354	F	2632	2849	perforated stone	stone	5.2	3.8	3.5			b	e
5.2	2334	Fl	2632	2816	pin	metal	8.8				0.8	c	c
5.2	2387	F	2632	2837	quern	stone	13.5	18.5	8			b	c
5.2	2388	B	2632	2833	quern	stone				5	17	b	c
5.2	2334	Fl	2632	2835	quern?	stone	7	15.2	5			b	c
5.2	2387	F	2632	3108	seal impression?	clay						c	e
5.2	2387	F	2632	3107	seal impression?	clay						b	e
5.2	2354	F	2632	2859	spindle whorl	stone				1.1	2.7	c	c
5.2	2348	Fl	2632	2788	vessel	pottery	6	4.1	4.2			b	c
5.2?	1708	W?		2318	pounder	stone	17.8	8.6	8.4			c	e
5.3	1658	G		2171	brick	-	13.9	10.9	52			b	na
5.3	1658	G		2160	perforated disc	pottery	5.9	5	1			c	e
5.3	1658	G		2240	perforated disc	pottery	7.3	7	0.9			b	e
5.3	1658	G		2168	rubber	stone	10.9	12	5.7			b	c
5.3	1658	G		2157	rubber	stone	21	15.4	8.7			b	c
5.3	1669	B		2320	rubber	stone	24.2	13.6	5.8			c	c
5.3	2281	W	2466	2836	quern	stone	27	18.2	5			b	c
5.3	2281	W	2466	2919	quern	stone	29.5	17	8			c	c
5.3	2280	F	2628	2724	bead	stone			0.6		1.1	c	c
5.3	2282	F	2628	2770	figurine	pottery	5.1	2.5	2.5			b	c
5.3	2342	Pv	2628	2799	pendant	stone	3.2	1.3	0.7			c	c
5.3	2343	Pv	2628	3092	perforated stone	stone	22.5	13.5	11			b	e
5.3	2343	Pv	2628	2832	quern	stone	24	23	10.3			b	c
5.3	2343	Pv	2628	2845	quern	stone	16.2		5.5			c	c
5.3	2343	Pv	2628	2842	quern	stone	11.5	10	5			b	c
5.3	2343	Pv	2628	2831	rubber	stone	13.3	13.5	5.5			b	c
5.3	2343	Pv	2628	2834	rubber	stone	10.5	17.3	7.2			b	c
5?	1349	W		1576	perforated stone	stone				4	21	c	e

AREA IV, LEVEL 6

AREA LEVEL	CONTEXT	CONTEXT CLASS	SUPRA-CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
6	2493	PF		3077	bead	stone			0.3	0.4		c	c
6	2114	G		2602	crucible	pottery	5.5	5.8	1.2	0.9	4.3	b	c
6	2635	F		3081	perforated disc	pottery				0.7	5.7	c	e
6	2670	Fl		3284	perforated disc	pottery				0.9	5.5	b	e
6	2670	Fl		3235	perforated disc	stone				3.6	6.3	c	e
6	2666	Fl		3096	perforated disc	pottery				0.9	3.5	b	e
6	2045	G		2487	perforated disc	pottery				0.6	4.2	c	e

AREA LEVEL	CONTEXT	CONTEXT CLASS	SUPRA-CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
6	2515	G		3065	perforated disc	pottery				1.2	6.2	c	e
6	2134	G		2579	perforated disc	pottery				1.1	6.2	c	e
6	2202	G		2677	perforated disc	pottery				1.2	8	c	e
6	2515	G		2911	perforated disc	pottery				0.9	5.5	c	e
6	2202	G		2679	figurine	pottery	4.1	3.6	2.5			b	c
6	2493	PF		2940	figurine	pottery	4.1	43	33			b	c
6	2453	F		2750	misc	pottery	3.7	37	7			c	na
6	2670	Fl		3184	misc	clay	0.7	5.5				b	na
6	2132	PF		2653	misc	ivory	9.7	2.1	0.3			c	na
6	2133	PF		2610	perforated stone	stone	45	34	17.8			c	e
6	2134	G		2583	rattle?	pottery	7.5	2.5	1.8			b	c
6	1878	G		2448	rubber	stone	10.7	13.7	6			b	c
6	2493	PF		2948	seal impression	clay				6.1	6.6	c	e
6	2515	G		2916	seal impression	pottery	5.6	2.9	0.5			b	e
6	2046	F	2122	2676	perforated disc	pottery	6.8	6	1			c	e
6	1986	Fl	2122	2540	perforated disc	pottery				0.8	4.7	c	e
6	1938	F	2122	2419	perforated disc	pottery				0.8	7.2	c	e
6	1945	F	2122	2423	misc	stone	5.7	2.8	6			b	na
6	2123	W	2122	2597	quern	stone	19.3	18.3	8.7			b	c
6	1956	Pv	2122	2587	quern	stone	16	12.8	11			b	c
6	1956	Pv	2122	2520	quern	stone	31.5	24	8			b	c
6	1956	Pv	2122	2517	quern	stone	20	17	10.5			b	c
6	1956	Pv	2122	2512	quern	stone	12.7	7.4	9.3			b	c
6	2123	W	2122	2599	rubber	stone	12	15.5	6			b	c
6	2123	W	2122	2594	rubber	stone	23.8	13.8	5.5			c	c
6	2123	W	2122	2592	rubber	stone	17.7	14.1	6.5			b	c
6	2112	W	2122	2628	rubber	stone	12	14.8	7			b	c
6	2123	W	2122	2598	rubber	stone	7	13	7			b	c
6	1956	Pv	2122	2576	rubber	stone	13.7	14.5	5.7			b	c
6	1956	Pv	2122	2519	rubber	stone	26.5	17.7	8.5			b	c
6	2123	W	2122	2596	rubber	stone	26	18	8.5			b	c
6	2046	F	2122	2678	seal impression	pottery	5.7	4	0.8			b	e
6	2118	W	2249	2634	pivot stone	stone	16.7	8.9	6.5			b	e
6	2537	PF	2536	3106	seal impression?	clay						c	e
6	2521	PF	2539	3118	bead	stone				0.2	0.5	c	c
6	2521	PF	2539	2947	bobbin	pottery				5.2	3.8	c	c
6	2521	PF	2539	2934	perforated disc	pottery				1.1	7.2	b	e
6	2521	PF	2539	3041	perforated disc	pottery				1	6	b	e
6	2521	PF	2539	3086	perforated disc	pottery				0.5	3.3	b	e
6	2521	PF	2539	3057	misc	pottery	6	5.5	0.9			b	na
6	2807	PF	2672	3205	perforated disc	pottery				1.3	5.6	c	e

AREA IV, LEVEL 7

AREA LEVEL	CONTEXT	CONTEXT CLASS	SUPRA-CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
7	1492	G		1636	bobbin	pottery				5	4.5	c	c
7	1492	G		1701	perforated disc	pottery	8.2	7.9	1.1			c	e
7	1492	G		1699	perforated disc	pottery	5.5	5.4	1			c	e
7	1492	G		1731	misc	metal						b	na
7.1	2927	G		3222	perforated disc	pottery				1.1	4.2	b	e
7.1	2926	G		3318	perforated disc	pottery				0.8	6.3	b	e
7.1	2927	G		3263	rubber	stone	32.5	17.5	5			c	c
7.1	2927	G		3264	rubber	stone	7.5	13.5	5.7			b	c
7.1	3034	F	2971	3342	basin	stone	25	22	7	17.5		b	c
7.1	2974	Fl	2971	3479	perforated disc	pottery	3.8	2.2	0.8			b	e
7.1	2931	OD	2971	3203	perforated disc	pottery				1	5.3	c	e
7.1	2931	OD	2971	3231	model wheel	pottery				4	5.7	c	c
7.1	2971	R	2971	3363	pivot stone	stone	28	27	19			c	e
7.1	3034	F	2971	3334	pivot stone	stone	36	24	18			c	e
7.1	3034	F	2971	3338	pivot stone	stone	21.5	15.5	4.2			c	e
7.1	3034	F	2971	3354	pivot stone	stone	13.5	13.5	5.8			c	e
7.1	3034	F	2971	3353	pivot stone	stone	21	16	11			c	e
7.1	3034	F	2971	3352	pivot stone	stone	28.5	17.2	10			c	e
7.1	3034	F	2971	3351	pivot stone	stone	29	20.8	13			b	e
7.1	3034	F	2971	3349	pivot stone	stone	29	22.5	10.8			c	e
7.1	3034	F	2971	3347	pounder	stone	18	7	6.2			b	e
7.1	3034	F	2971	3341	quern	stone	14.4	20.5	5.5			b	c
7.1	3034	F	2971	3348	quern	stone	13.5	11.7	7.2			b	c
7.1	3034	F	2971	3346	rubber	stone	22	22.5	4.9			b	c
7.1	3034	F	2971	3339	rubber	stone	16.4	9	4.7			b	c
7.1	2998	W	3135	3286	perforated disc	pottery				1.2	6	c	e
7.1	2998	W	3135	3285	perforated disc	pottery				0.7	5.4	c	e
7.1	2929	F	3135	3217	perforated disc	pottery				1.1	7.2	c	e
7.1	2998	W	3135	3316	misc	terracott	17.8	10	3.9			c	na
7.1	2929	F	3135	3236	misc	terracott	17.5	9.5	3.4			c	na
7.1	2998	W	3135	3380	pendant	stone				0.4	2.1	b	c
7.1	2998	W	3135	3328	pot	pottery						c	c
7.1	2998	W	3135	3295	quern	stone	16	10.5	7			b	c
7.2	2880	Fl	2886	3291	jar	pottery						c	c
7.2	2894	OD	2886	3272	perforated stone	stone				6.2	15.5	b	e
7.2	2895	Fl	2886	3257	quern?	stone	21	11.8	7.7			b	c
7.2	2811	F	2888	3214	modified sherd	pottery	10.1	6	0.9			b	e
7.2	2928	F	2888	3362	pivot stone	stone	36.5	29.5	19			c	e
7.2	2811	F	2888	3262	quern	stone	14.7	14.5	10.5			b	c
7.2	2879	W	2890	3234	pounder	stone	12	4.6	3.8			c	e
7.2	2809	F	2890	3268	rubber	stone	8.5	12.5	6.5			b	c
7.2	2879	W	2890	3258	rubber	stone	19	20.5	6			b	c
7.2	2875	F	2930	3196	dagger?	metal	1.8	2	1.2			b	c
7.2	2893	W	2930	3216	perforated disc	pottery				0.9	7.7	b	e
7.2	2875	F	2930	3213	perforated disc	pottery				1.1	8	c	e
7.2	2875	F	2930	3204	perforated disc	pottery				1	5.5	b	e
7.2	2875	F	2930	3238	misc	terracott	8.5	6	4.7			b	na

AREA LEVEL	CONTEXT	CONTEXT CLASS	SUPRA-CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION	CURATION
7.2	2875	F	2930	3182	seal impressions	pottery	5.7	3.5	1.1			b	e
7.2	2875	F	2930	3207	spindle whorl	pottery				0.6	4.3	c	c
7.2	2875	F	2930	3478	unperforated	pottery	6.6	6.5	1.2			c	e
7.2	2875	F	2930	3226	vessel	stone				4.8	5.7	b	c
7.3	1619	F		1698	awl	bone	4.5	2				c	e
7.3	1619	F		1696	bobbin	pottery				3.6	4.4	c	c
7.3	1619	F		1697	bobbin	pottery				4.2	5.6	c	c
7.3	1619	F		1692	bobbin	pottery				4.9	6.7	c	c
7.3	1619	F		1695	misc	stone	5.9	5.8				c	na
7.3	2172	PF		2642	pin	metal	3.8				0.4	b	c
7.3	1619	F		1700	pounder	stone					7	c	e
7.3	2055	PF		2523	perforated disc	pottery	6.2	4.3	1.1			b	e
7.3	2055	PF		2525	perforated disc	pottery	6.4	6	1			c	e
7.3	2055	PF		2572	quern	stone	10.8	9.6	5.3			b	c
7.3	2779	G		3254	rubber	stone	3.2	16.5	6.5			c	c
7.3	2806	F	2210	3237	misc	stone	12.3	0.5	3.9			b	na
7.3	2784	F	2787	3202	perforated disc	pottery				0.7	4.4	c	e
7.3	2788	Ps	2787	3249	pot	pottery						c	c
7.3	2808	W	2930	3246	perforated disc	pottery						b	e
7.3	2808	W	2930	3361	weight?	stone	4.5	2.6	2.7			c	e
7.3	2805	F	2976	3220	perforated disc	pottery				0.9	4.7	c	e
7.3	2805	F	2976	3209	perforated disc	stone				3.5	5.6	b	e
7.3	2805	F	2976	3177	macehead	stone				5.5	6	b	c
7.3	2805	F	2976	3221	modified sherd	pottery	7.3	4.5	1			b	e

AREA IV, LEVEL 4 TOMBS

TOMB 956

CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION
956	894	pin	metal						c
956	883	bead	carnelian	3			0.9		c
956	884	bead	rock crystal			1.1	1.8		c
956	885	bead	carnelian			0.4	0.8		c
956	886	bead	metal	1.6			0.9		c
956	887	bead	carnelian	0.9			0.6		c
956	888	bead	rock crystal			0.3	0.9		c
956	889	burial	-						na
956	890	pin	metal						c
956	891	pin	metal						c
956	882	pin	metal						c
956	893	pin	metal						c

CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION
956	895	misc	metal						c
956	896	bead	carnelian			0.4	0.8		c
956	892	pin	metal						c
956	869	open vessel	pottery				4.5	12.4	c
956	864	open vessel	pottery				4.3	11.8	c
956	897	pin	metal						c
956	881	pin	metal						c
956	867	open vessel	pottery				4.5	12.3	c
956	865	open vessel	pottery				6	8	c
956	868	open vessel	pottery				3.9	11.4	c
956	866	open vessel	pottery				3.9	12	c
956	870	open vessel	pottery				4.3	10.3	c
956	871	open vessel	pottery				3.8	10	c
956	872	closed vessel	pottery				9.5	6.4	c
956	879.0	pin	metal						c
956	880	pin	metal						c
956	879.0	pin	metal						c
956	879.0	pin	metal						c
956	873	open vessel	pottery						c
956	879.0	pin	metal	13.5				1.2	c
956	878	pin	metal	5.1				1.2	c
956	875	closed vessel	pottery				7.2	12.5	c
956	874	vessel	pottery						c
956	877	closed vessel	pottery						c
956	876	open vessel	pottery				11	5.3	c

TOMB 1036

CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION
1013	845	blade (metal)?	metal	4.5	1.2	0.2			b
1013	1252	bracelet /	metal	4				0.9	b
1036	1171	pin	metal	2.4				3.5	b
1036	1167	pin	metal	1.8				0.4	b
1036	1170	pin	metal	1.8				0.4	b
1036	1168	pin	metal	1.7				0.3	b
1036	1169	pin	metal	0.9					b
1036	1172	pin	metal	1.9				0.4	b
1036	1173	pin	metal	1.5				0.3	b
1036	1175	pin	metal	1				0.2	b
1036	1176	pin	metal	2.8				0.2	b
1036	1174	misc	metal	1.4	0.5	0.3			b
1036	1177	band	metal	1.2	1	0.1			b
1036	1178	band	metal	1.6	1	0.1			b
1036	1206	bowl	pottery				2.6	5.1	c

CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION
1036	1207	bowl	pottery				4.4	12	c
1036	1208	bowl	pottery				5.4	12.6	c
1036	1213	figurine	clay	12	4.7	3.1			b
1036	1214	band	metal	1	0.8	0.6			b?
1036	1218	earring	metal	1	0.5				b
1036	1230	pobisher?	stone	6.1	3.7	5			c
1036	1236	bead / pendant	shell	1.1	0.7	0.7			c
1036	1783	bowl	pottery				5.2	12.7	c
1036	1166	pin?	metal	4.7				0.4	b
1036	1153	figurine	clay	5.7	3.7	2.9			b
1036	1212	figurine	clay						c
1036	1157	band?	metal	1.6	1	0.8			b
1036	1165	pin	metal	2.6				0.5	b
1036	1155	pendant	faience and quartz	1.7	0.7	0.7			c
1036	843	closed vesseb	pottery				2.5	3.1	c
1036	848	pin	metal	2.8	0.9	0.6			b
1036	1152	figurine	clay	11.6	4.5	3.3			c
1036	1156	bead	carnelian				0.3	0.7	c
1036	1158	pin	metal	7.6	0.6	0.7			b
1036	1159	pin	metal	9				0.3	c
1036	1160	dagger	metal	3.1	1.7	2.5			b
1036	1161	pin	metal	10.4				0.4	c
1036	1162	pin	metal	2.2				0.5	b
1036	1163	pin	metal	3.1				0.3	b
1036	1164	pin	metal	3.8				0.4	b
1036	1154	figurine?	clay	1.3	0.9	0.9			b

TOMB 1410

CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION
1410	1456	jar	pottery				9.5	7.7	c
1410	1457	bowl	pottery				4.7	11.5	c
1410	1564	burial	bone						na

TOMB 1518

CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION
1518	1502	bowl	pottery				6	16	c
1518	1501	bowl	pottery				5	12.9	c

CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION
1518	1500	jar	pottery				13	9.6	c
1518	1530	burial	bone						c
1518	1497	burial							c
1518	1496	jar	pottery				11	12.8	c
1518	1503	jar	pottery						c
1518	1538	ring	metal			0.4		3.6	c
1518	1509	jar	pottery				4.9	6	c
1518	1729	pithos	pottery						c
1518	1668	cup	pottery				2.7	6.1	c
1518	1667	pin	metal	2.5				0.2	b
1518	1547	pin	metal	7.7				0.4	b
1518	1546	pin	metal	6.8				0.4	b
1518	1545	jar	pottery				6.8	5.8	c
1518	1544	bowl	pottery				3.8	11.3	c
1518	1543	burial	bone						c
1518	1542	burial	bone						c
1518	1541	cup	pottery				8	9.4	c
1518	1504	jar	pottery				6.1	7.6	c
1518	1539	pin	metal	10.5				0.3	b
1518	1537	pin	metal	5.4				0.3	b
1518	1536	burial							c
1518	1535	cup	pottery				7.5	9.7	b
1518	1534	jar	pottery						c
1518	1532	bracelet	metal			0.3		3.8	b
1518	1531	burial							c
1518	1510	jar	pottery				10.7	9.2	c
1518	1508	cup	pottery				5.8	5.5	c
1518	1507	bowl	pottery				3.8	11	c
1518	1506	jar	pottery				10	8.2	c
1518	1505	cup	pottery				9	9.9	c
1518	1540	jar	pottery				5.7	7.4	c
1594	1630	foil	metal	2	1.2				b

TOMB 1670

CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION
1670	2253	jar	pottery				11.5	8.6	c
1670	2311	bowl	pottery				4.6	11.8	c
1670	2310	cup	pottery				8.9	8.4	c
1670	2309	pin	metal	17.6				0.6	c
1670	2308	jar	pottery				9.6	7.5	c
1670	2307	bottle	pottery				20	9.3	c
1670	2305	bowl	pottery				4.3	12.7	c
1670	2475	bowl	pottery				4.2	10.8	c

CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION
1670	2252	beads							c
1670	2251	bead							c
1670	2250	pin	metal	8				0.9	b
1670	2249	pithos	pottery	3.6	2.5				b
1670	2248	bowl	pottery				5.4	13.5	c
1670	2247	pin	metal	2.9				0.3	b
1670	2306	bowl	pottery				4.5	12.6	c
1670	2506	bowl	pottery				4.7	12	c
1670	2246	necklace	shell						c
1670	2313	burial	bone						c
1670	2707	bowl	pottery				4.8	12	c
1670	2510	bowl	pottery				4.4	11.4	c
1670	2509	bottle	pottery				11	6.3	c
1670	2312	burial	bone						c
1670	2507	bottle	pottery				6.7	7.4	b
1670	2315	pin	metal	2				0.4	b
1670	2505	globular jar	pottery				5.9	7.3	c
1670	2504	bowl	pottery				4.4	11.9	c
1670	2503	jar	pottery				10.6	8.5	c
1670	2502	burial	bone						c
1670	2501	burial	bone						c
1670	2500	burial	bone						c
1670	2508	jar	pottery				12.2	10.3	c
1670	2200	jar	pottery				8.4	5.8	c
1670	2193	burial	bone						c
1670	2206	bowl	pottery				4.8	11.6	c
1670	2205	globular jar	pottery				13	15.2	c
1670	2204	bead		4		3			b
1670	2203	cooking pot	pottery				23.8	37	b
1670	2207	bowl	pottery				4.1	11.2	c
1670	2201	jar	pottery				7.2	10.2	c
1670	2198	jar	pottery				6.8	8.6	c
1670	2199	bowl	pottery				4.6	11.8	c
1670	2197	jar	pottery				9.7	8.3	c
1670	2195	cup	pottery				8.7	8.2	c
1670	2194	burial	bone						c
1670	2245	bead	stone				0.4	1.5	c
1670	2474	burial	bone						c
1670	2202	jar	pottery				13.9	11.4	c
1670	2216	burial	bone						c
1670	2220	globular jar	pottery				8.2	10.7	c
1670	2219	globular jar	pottery				9.4	11.1	c
1670	2196	bowl	pottery				4.2	11.7	c
1670	2218	globular jar	pottery				7.9	10	c
1670	2192	jar	pottery				11.7	9.8	c
1670	2217	jar	pottery				12.0	8.7	c
1670	2243	globular jar	pottery				7.7	6.4	c
1670	2215	burial	bone						c
1670	2214	burial	bone						c
1670	2213	pin	metal	6.2				0.7	b

CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION
1670	2212	pin	metal	6.4				0.2	b
1670	2211	jar	pottery				10.9	8.3	c
1670	2210	pin	metal	8				0.6	c
1670	2209	globular jar	pottery				9.9	12.3	c
1670	2208	jar	pottery				12.1	11.3	c
1670	2244	pin	metal	6.9				0.6	b
1671	2705	burial?	bone						b
1671	2706	pin	metal	1.8					b

TOMB 1687

CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION
1687	2288	pin	metal	15				0.5	c
1687	2267	bowl	pottery				5.5	13.9	c
1687	2268	necklace	stone						c
1687	2269	earring	metal	1.5	1.4	3.5			c
1687	2270	earring	metal	1.7	1.4	0.3			c
1687	2281	jar	pottery				9.5	7.3	c
1687	2282	globular jar	pottery				5.6	6.8	c
1687	2283	globular jar	pottery				5.3	7.7	c
1687	2284	bead	limestone				0.2	0.6	c
1687	2287	pin	metal	4.5				0.3	b?
1687	2289	jar	pottery				10.7	8.5	c
1687	2290	jar	pottery				12.7	11	c
1687	2291	bowl	pottery				4.6	12.3	c
1687	2292	bowl	pottery				14.6	12.1	c
1687	2222	cup	pottery				9	8.6	c
1687	2293	pin	metal	10				0.5	c
1687	2294	beads	stone and shell						c
1687	2266	globular jar	pottery				5.6	71	c
1687	2285	bottle	pottery				10.5	68	c
1687	2231	jar	pottery				6.5	58	c
1687	2221	globular jar	pottery				7.9	95	c
1687	2223	burial	bone						c
1687	2225	bowl	pottery				4.1	10	c
1687	2226	cup	pottery				7.1	9	c
1687	2227	jar	pottery				12.1	5.9	c
1687	2228	jar	pottery				13	11.4	c
1687	2224	burial	bone						c
1687	2230	bowl	pottery				4.1	10.3	c
1687	2265	globular jar	pottery				6.6	7.5	c
1687	2232	jar	pottery				12.2	9.3	c
1687	2233	pin	metal	3.9				0.6	b
1687	2234	cup	pottery				9.6	8.8	c

CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION
1687	2235	pin	metal	5.4				0.3	c
1687	2260	jar	pottery				12.7	10.4	c
1687	2261	pin	metal	8.4				0.7	b
1687	2262	bowl	pottery				5	11.6	c
1687	2263	globular jar	pottery				7.1	9.4	c
1687	2264	bowl	pottery				5.1	12.8	c
1687	2229	bowl	pottery				4.3	12.1	c

TOMB 1850

CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION
1850	2389	pin?	metal	19.5			1.5		b
1850	2401	cup/bottle?	pottery				5.8	6.9	b
1850	2399	pin	metal	2.2				0.2	b
1850	2398	burial	bone						c
1850	2387	burial	bone						c
1850	2386	burial	bone						c
1850	2385	burial	bone						c
1850	2380	burial	bone						c
1850	2379	cooking pot	pottery				24	40	b
1850	2400	globular jar	pottery				7	9.7	c
1850	2388	burial	bone						c

TOMB 1856

CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	DIAMETER	HEIGHT	CONDITION
1856	2631	bowl	pottery				124	47	c
1856	2632	globular jar	pottery				72	74	c
1856	2384	globular jar	pottery				75	83	c
1856	2383	globular jar	pottery				112	99	c
1856	2382	bowl	pottery				125	54	c
1856	2381	burial	bone						c

Tomb 1931

CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION
1931	2408	bead	shell				4.5	1.9	c
1931	2420	beads	shell						c
1931	2421	necklace	stone						c
1931	2407	burial	bone						na

Area IV, Level 5 Tombs

Tomb 787

CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION
787	955	pot	pottery				6.4	8.5	c
787	956	shallow bowl	pottery				3.3	12.5	c
787	1010	shallow bowl	pottery				5.8	14.5	c
787	1511	disc	pottery	3	2.8	0.2			c
787	1512	bead	stone				0.7	1.1	c
787	1513	bobbin	pottery				6.2	5.5	c
787	1550	pendant	faience	1.7	1.2	0.3			c
787	1604.	quern	stone	28	22	11			c
787	1606	bowl	stone	29	18				c
787	1607	rubber	stone	21	19	8			b
787	1608	rubber	stone						c
787	1609	quern	stone	31	27	6.5			c
787	1610	rubber	stone						b
787	1638	misc	metal	6	4.2	0.3			c
787	1675	burial	bone						na
787	1742	beads	misc						c
787	1744	burial	bone						c
787	2011	burial	bones						c
1025	855	disc	pottery	5.6	3.3	0.9			b
1053	1233	pin	metal	1.8					b
1053	1234	pendant	shell	2.2	2.1	0.9			c
1053	1231	axe?	stone	15.6	8.4	3.8			c
1056	1217	open vessel	pottery						c
1056	1226	bead							c
1056	1224	bead							c
1056	1223	bead							c
1056	1222	bead							c
1056	1221	bead							c
1056	1219	bead	metal	1				0.7	c

CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION
1056	1241.	pin	metal						c
1056	1216	closed vessel	pottery						c
1056	1215	closed vessel	pottery					7	b
1056	1211	bead	shell						c
1056	1210	bead							c
1056	1209	misc	bitumen?	0.7	0.5	0.4			na
1056	1205	burial							na
1056	1220	bead							c
1056	1245	pin	metal	11				0.3	b
1056	1250	bead							c
1056	1778	pedestal cup	pottery						c
1056	1779	pedestal cup	pottery						c
1056	1249	bead	faience				0.3	0.5	b
1056	1248	bead	faience?						c
1056	1225	bead							c
1056	1228	bead							c
1056	1246	bead	vitreous material				0.6	0.9	c
1056	1240	pin	metal	4					b
1056	1244	pin	metal	1.4					b
1056	1243	pin	metal	3.1				0.3	b
1056	1242	misc	metal	0.5					b
1056	1241.	pin	metal						c
1056	1241.	pin	metal						c
1056	1204.	vessel	glass	1.4	1	0.2			b
1056	1247	bead	faience?						c
1056	1190	bead	shell				0.2	0.5	c
1056	1179	hair-ring	metal	1.3	1.3	1.1			c
1056	1180	bead	metal	0.8	0.7	0.7			c
1056	1181	bead	stone?				0.1	0.2	c
1056	1182	bead	stone?				0.2	0.2	c
1056	1183	bead	vitreous mat.?				0.5	0.4	c
1056	1184	bead	shell				0.5	0.2	c
1056	1185	bead	shell				0.5	0.2	c
1056	1186	bead	vitreous mat.?				0.6	0.3	c
1056	1187	bead	vitreous mat.?				0.7	0.5	c
1056	1227	bead							c
1056	1188	bead	stone?				0.2	0.2	c
1056	1189	bead	shell				0.5	0.2	c
1056	1196	bead	vitreous mat.?				0.6	0.5	c
1056	1202	tube	bone	10	3.1	2.6			b
1056	1201	pendant	faience	1.6	1.3	0.5			c
1056	1200	bead	carnelian				0.6	0.3	c
1056	1199	bead	carnelian				2.5	0.5	c
1056	1204.	vessel	glass	1.2	0.9	0.2			b
1056	1197	bead	shell				0.2	0.5	c
1056	1195	bead	vitreous mat.?	5.5				0.5	c
1056	1194	bead	shell				0.1	0.4	c
1056	1193	bead	faience	0.4				2.5	c
1056	1192	bead	rock crystal	0.6				0.8	c
1056	1191	bead	vitreous mat.?	0.5				0.5	c

CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION
1056	1198	bead	shell	0.4	3	0.2			c
1071	1229	disc	pottery	6.8	6.6	1			c
1071	1239	disc	pottery	7.3	7	1.1			c
1488	1490	pin	metal	4.7		0.5			c
1581	1782	vessel	pottery						c

TOMB 1362

CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	DIAMETER	HEIGHT	CONDITION
1362	1678	burial	bone						na
1362	1672	cooking pot	pottery						c

TOMB 1367

CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION
1367	1677	burial	bone						c
1367	1574	quern	stone	45	25	9			c
1367	1765	pithos	pottery						c
1367	1670	pithos	pottery						c
1367	1629	pin	metal	6				0.3	b
1367	1478	jar	pottery				13	7.5	c
1367	1468	quern	stone	46	25	11			c
1367	1467	bowl	pottery				1.3	5.7	c
1367	1459	necklace	misc				0.5	1.4	c
1367	1458	pin	metal	55				0.6	c
1367	1479	bowl	pottery				3.8	12.7	c
1373	1677	burial	bone						na

TOMB 1369

CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	DIAMETER	HEIGHT	CONDITION
1743	1369	beads (x29)	misc						c
1480	1369	bottle	pottery						c

CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	DIAMETER	HEIGHT	CONDITION
1676	1369	burial	bone						Na
1669	1369	cooking pot	pottery						b

TOMB 1480

CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION
1480	1683	pithos	pottery						c
1480	1681	burial	bone						na

TOMB 1481

CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION
1481	1680	burial	bone						na
1481	1681	cooking pot	pottery						c

TOMB 1482

CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION
1482	1597	jar	pottery				7.6	6.9	c
1482	2013	burial	bones						c
1482	1586	bowl	pottery						c
1482	1671	cooking pot	pottery						c
1482	1604	pins	metal						c
1482	1602	jar	pottery					7	c
1482	1601	cup	pottery				7	7.8	c
1482	1600	jar	pottery				7.3	7.8	c
1482	1599	jar	pottery				7	6.7	c
1482	1598	jar	pottery					14	c
1482	1595	stemmed cup	pottery					14	c
1482	1594	stemmed cup	pottery				5.4		c
1482	1593	cup	pottery				21	15.5	c
1482	1592	stemmed jar	pottery				9.8	11	c
1482	1591	pedestal jar	pottery				18.4	15	c

CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION
1482	1590	stemmed cupt	pottery				13.2	13.5	c
1482	1589	pedstal jar	pottery						c
1482	1587	cup	pottery						c
1482	1588	cup?	pottery						c
1482	1596	pedestal jar	pottery						c
1482	1572	rubber	stone	15	13	4.5			b
1482	1573	pestle	stone						c
1482	1728	vessel	pottery						c
1482	1735	burial	bone						c
1482	2280	misc	metal						c

TOMB 1487

CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION
1487	2010	burial	bones						c
1487	2048	cooking pot	pottery						c
1487	1567	cup	pottery					7.3	b
1487	1556	bracelet?	metal	2.9					b
1487	1730	pin?	metal	1.5					b

TOMB 1583

CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION
1583	1703	burial	bones						c
1583	1766	pithos	pottery						c
1583	1741	bowl	pottery						c
1583	1740	cooking pot	pottery						c
1583	1714	cooking pot	pottery						c
1583	1713	cooking pot	pottery						c
1583	1712	beads	misc						c
1583	1711	jar	pottery				6.8	6.5	c
1583	1708	jar	pottery						c
1583	1706	cup	pottery				7.8	10	c
1583	1705	bowl	pottery						c
1583	1704	tripod jar	pottery				10.6	9.4	c
1583	1707	bowl	pottery						c
1583	1651	bowl	pottery				4	16	b
1583	1690	jar	pottery						c
1583	1644	bowl	pottery				2.6	12	c

CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION
1583	1645	jar	pottery						c
1583	1646	cooking pot	pottery						c
1583	1647	pin	metal	1.3					c
1583	1710	cooking pot	pottery						c
1583	1649	jar	pottery					8	b
1583	1626	pedestal jar	pottery						c
1583	1684	burial	bones						c
1583	1624	burial	pottery						c
1583	1685	bowl	pottery				4.3	12.5	c
1583	1686	beads	faience						c
1583	1688	necklace	misc						c
1583	1689	beads	stone				0.5	1.5	c
1583	1648	burial	bones						c

TOMB 1703

CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	DIAMETER	HEIGHT	CONDITION
1703	2331	tube	metal	31	15	8			b
1703	2341	pedestal	pottery				110	66	b
1703	2336	axe	metal	72	66	4			c
1703	2335	beads	metal	12		9			c
1703	2334	pin	metal	67		4			c
1703	2332	earring?	metal			7	14		c
1703	2330	ring	metal				30		c
1703	2329	very shallow	pottery				129	34	c
1703	2328	globular jar	pottery				110	96	c
1703	2327	burial	bone						c
1703	2326	burial	bone						c
1703	2325	eggshell	shell	18	17				b
1703	2333	tube	metal	32	15	7			c

AREA IV, LEVEL 6 TOMBS

TOMB 1885

CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	HEIGHT	DIAMETER	CONDITION
1885	2395	pin	metal	9.1				0.4	c
1885	2404	pounder	stone	14.6	6.7		6.3		c
1885	2397	burial	bone						c
1885	2396	pin	metal	7.3				0.3	b
1885	2393	pedestal	pottery				8.2	8.2	c
1885	2392	jar	pottery				12	11.7	c
1885	2390	earring	metal			0.3		11..5	c
1885	2391	globular jar	pottery				10.3	11	c
1885	2394	bowl	pottery				5.1	10.4	c

APPENDIX 4

KISSONERGA-MYLOUTHKIA DATABASE

CONTENTS

NOTES ON FIELDS AND CONTEXT CLASSIFICATIONS UTILISED IN KISSONERGA-MYLOUTHKIA DATABASE

There follows a brief note defining each of the fields used in the Mylouthkia database. This database differs in a few respects from those of Sabi Abyad and Jerablus. The most notable difference is the absence of find spot measurements (as in the case of Sabi Abyad) and of context classes (as in the case of Jerablus). Where data is unavailable (e.g. dimensions are missing) cells are left blank.

DATABASE FIELDS: DEFINITIONS

- Phase: refers to the period or phase of activity identified by the excavator and is only applicable to multiphase pits 1 and 16 and to Building 200.

- Context no: record of the excavation unit number from which the find was recovered.

- Site find no: project small find number. (N.B. Cat. no. finds are those that were recovered in the first campaign of excavation and which were only briefly recorded before being discarded).

- Class: artefact classification follows the classification system used by the Lemba Archaeological Project (see **Appendix 1** for additional notes).

- Material: refers to the material of manufacture and follows simple divisions (e.g. pottery, stone, clay, metal, bone, antler and shell).

- Length
- Width
- Thickness
- Height
- Diameter

-Condition: artefacts are classified as complete or broken.

-Curation: artefacts are classified as curated (c) or expedient (e) (for general distinction see **section 4.3.3**). Where artefacts cannot be classified 'na' is entered.

BUILDING 152

CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	CONDITION	CURATION
152.0	449	bead	antler	3.3	1.3	1.2	b	c
152.0	450	pounder	stone	19.7	9.6	3.1	c	e
152.0	451	quern	stone	29.7	16.2	4.9	c	c
152.111	407	hammerstone	stone	11.5	10	4.8	c	e
152.111	376	hammerstone/grinder	stone	10	5.3	3.5	b	e
152.111	Cat. 273	antler debitage	antler	2.4	1.1	-	na	na
152.122	405	misc. object	stone	13.3	6.1	5.4	b	e
152.122	397	pounder	stone	6	5.6	5.6	c	e
152.122	398	quern	stone	44	22.4	3.6	b	c
152.153	447	vessel	pottery	14	6.3	19.3	b	c
152.154	452	quern	stone	32.8	20.9	3.7	b	c
152.163	408	axe-shaped grinder	stone	10	6.5	3.1	c	c
152.163	Cat. 274	antler debitage	antler	4.1	1.1	-	na	na
152.163	Cat. 275	antler debitage	antler	1.6	1.1	-	na	na
152.182	430	cupped stone	stone	14.4	9.4	4.7	c	e
152.182	433	misc. object	stone	18.6	7.7	2.2	b	e
152.182	431	quern	stone	14.6	14	2.7	b	c
152.182	432	quern	stone	11.2	7.8	8.2	b	c
152.182	434	quern	stone	25.4	18	7.6	b	c
152.183	436	vessel	pottery	51	43.5	11	b	c
152.183	437	vessel	pottery	-	-	9.6	b	c

BUILDING 200

PHASE	CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	CONDITION	CURATION
1	200.126	1471	adze	stone	3.4	5.8	1.5	b	c
1	200.126	1300	axe	stone	8.6	4.5	2.4	c	c
1	200.305	1425	axe-shaped grinder	stone	11.5	5.5	4.3	c	c
1	200.126	1469	bowl	stone	5	6.1	2.8	b	c
1	200.126	1470	bowl	stone	8.2	3.4	2.2	b	c
1	200.215	1120	bowl	stone	8.4	5.7	2.8	b	c
1	200.305	988	bowl	stone	3.1	3	1.4	b	c
1	200.305	1014	bowl	stone	6.1	4.8	1.5	b	c
1	200.305	1396	bowl	stone	5.4	5	4	c	c
1	200.305	1424	bowl	stone	6.6	6.6	2.6	b	c
1	200.305	1723	bowl	stone	6	4.2	1.1	b	c
1	200.316	1677	bowl	stone	5.2	4.1	2.1	b	c
1	200.126	1944	chisel	stone	2.8	1.3	0.9	b	c
1	200.305	1408	chisel	stone	3	1.2	1.1	b	c
1	200.316	1678	cupped stone	stone	14.5	11.7	7.9	c	e
1	200.126	1419	flaked tool	stone	7.8	5.3	1.8	c	c
1	200.286	1356	grooved stone	stone	10	8.7	4.2	b	e

Phase	Context	Site Find no.	Class	Material	Length	Width	Thickness	Condition	Curation
1	200.126	1385	hammerstone	stone	9.3	7.1	4.6	c	e
1	200.126	1418	hammerstone	stone	12.3	8.1	6	b	e
1	200.126	1420	hammerstone	stone	11.4	10.4	4.9	c	e
1	200.286	1354	hammerstone	stone	12.6	8.2	4.5	c	e
1	200.286	1355	hammerstone	stone	7.8	5.6	3.9	b	e
1	200.286	1357	hammerstone	stone	7.8	6.7	3.9	b	e
1	200.305	1672	hammerstone	stone	10.5	9.1	3.5	c	e
1	200.305	1673	hammerstone	stone	9.5	7.4	5.4	c	e
1	200.305	1674	hammerstone	stone	7.5	7	2.9	b	e
1	200.305	1676	hammerstone	stone	7.5	5.9	4.1	c	e
1	200.305	1693	hammerstone	stone	10.8	7.6	4.9	c	e
1	200.305	1694	hammerstone	stone	13.2	7.1	5.5	b	e
1	200.305	1695	hammerstone	stone	8.6	6.9	6	c	e
1	200.305	1696	hammerstone	stone	11.9	8.5	5.6	c	e
1	200.126	1295	hammerstone/grinder	stone	10.7	10.1	5.1	c	e
1	200.126	1479	hammerstone/grinder	stone	10.2	8.7	4.4	c	e
1	200.305	1392	hammerstone/grinder	stone	9.9	7	5	c	e
1	200.305	1404	hammerstone/grinder	stone	6.9	6.5	5.2	e	e
1	200.305	1697	lid	stone	11.6	9.8	3.6	c	e
1	200.126	1942	misc. object.	pottery	4.8	3.1	3.1	b	na
1	200.305	1410	misc. object.	stone	7.3	5.6	0.6	b	na
1	200.286	1349	mortar	stone	47	31	17.5	c	e
1	200.305	1943	needle	bone	1.9			b	c
1	200.305	1950	pendant	shell	1.2	1.2	0.4	c	c
1	200.126	1969	perforated sherd	pottery	4.3	3.1	1	b	c
1	200.126	1468	pounder	stone	6.2	5.5	4.6	c	e
1	200.305	1387	pounder	stone	7.9	7.2	3.3	c	e
1	200.305	1388	pounder	stone	6	5.2	5	c	e
1	200.305	1389	pounder	stone	5.3	5.2	4.7	c	e
1	200.305	1390	pounder	stone	3.1	4.2	2.8	b	e
1	200.305	1426	pounder	stone	10.3	5.9	6.1	b	e
1	200.305	1675	pounder	stone	6.2	5.9	5.4	c	e
1	200.316	1421	rubber	stone	36.4	13.6	3.8	c	c
1	200.305	1409	rubbing stone	stone	5.2	4.8	3	b	e
1	200.305	1393	worked shell?	shell	5.6	5.3	1.6	c	?
2	200.283	1360	axe	stone	12	6.1	3.6	c	c
2	200.285	1345	axe	stone	4.5	3.4	2.6	b	c
2	200.285	1340	bead	shell	0.9			b	c
2	200.285	1411	bead	shell	1.2			b	c
2	200.285	1412	bead	shell	1.8			b	c
2	200.283	650	bowl	stone	2.3	2.1	1.2	b	c
2	200.283	1384	bowl	stone				b	c
2	200.283	1481	bowl	stone	4.4	1.7	0.9	b	c
2	200.289	1352	bowl	stone	6.5	5.9	3.7	b	c
2	200.283	1381	flaked tool	stone	6.7	4.2	2.1	b	c
2	200.283	1383	flaked tool	stone	4.3	2.5	1.3	c	c
2	200.285	1342	flaked tool	stone	8.5	5.2	1.5	c	c
2	200.285	1344	flaked tool	stone	4.1	6.4	3.1	b	c
2	200.288	1350	flaked tool	stone	6.9	5.8	1.4	b	c
2	200.285	1398	hammerstone	stone	5.7	4.6	3.6	c	e

PHASE	CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	CONDITION	CURATION
2	200.288	1351	hammerstone	stone	12.3	9.9	3.7	c	e
2	200.289	1981	hammerstone	stone	6.7	5.7	4.9	b	e
2	200.295	1358	hammerstone	stone	16.7	7.6	5	c	e
2	200.283	1382	misc. object	stone	15.1	13.9	2.3	b	?
2	200.283	1986	misc. object	?	4	2.2	1.7	b	?
2	200.285	1347	pebble grinder	stone	7.6	4.4	1.4	b	e
2	200.305	1400	polisher	stone	8.2	2.2	1.1	c	e
2	200.285	1395	pounder	stone	6.3	5.3	5.3	c	e
2	200.285	1413	pounder	stone	6.2	5.4	4.8	c	e
2	200.295	1359	pounder	stone	13.1	5.4	4	c	e
2	200.283	1480	rubber	stone	8	6.2	3.9	b	c
2	200.285	1386	rubber	stone	10.2	12.9	2.5	b	c
2	200.285	1348	rubbing stone	stone	8.7	7.2	4.2	c	e
2	200.285	1397	rubbing stone	stone	9.3	6.8	5.2	c	e
2	200.285	1346	spatula	bone	10.4	1.4	0.8	c	e
3	200.151	404	adze	stone	5.5	1.9	1.1	b	c
3	200.151	543	adze	stone	5.1	4.3	1	c	c
3	200.211	459	adze	stone	11.3	5.2	2.7	c	c
3	200.211	465	adze	stone	6.8	4.3	1.1	c	c
3	200.211	466	adze	stone	5.7	4.4	1.1	c	c
3	200.211	470	adze	stone	6.3	4.2	1.1	c	c
3	200.211	477	adze	stone	5.9	5.6	1.4	c	c
3	200.211	506	adze	stone	5.8	4.3	0.8	c	c
3	200.211	524	adze	stone	6	4.2	1.5	c	c
3	200.211	527	adze	stone	5.2	4.2	1.2	c	c
3	200.211	529	adze	stone	8.1	6.2	1.9	b	c
3	200.270	1291	adze	stone	4.6	4.9	2.3	b	c
3	200.276	Cat. 313	antler debitage	antler	9.9	3.8		c	?
3	200.312	Cat. 317	antler debitage	antler	3	1.4		c	?
3	200.159/17	1485	axe	stone	5.3	6.1	1.8	b	c
3	200.151	481	axe	stone	12.3	6.8	4	c	c
3	200.151	499	axe	stone	12.5	5.4	2.6	c	c
3	200.151	515	axe	stone	10.6	5.2	2.3	c	c
3	200.151	516	axe	stone	13	6.3	3.5	c	c
3	200.151	517	axe	stone	11.9	6.3	3.8	c	c
3	200.151	530	axe	stone	10.7	6.3	2.2	c	c
3	200.151	538	axe	stone	9.4	4.7	2	c	c
3	200.151	541	axe	stone	12.1	6.8	3.1	c	c
3	200.151	542	axe	stone	7.9	5.7	2.7	b	c
3	200.211	460	axe	stone	11.7	6.7	3.1	b	c
3	200.211	461	axe	stone	11.7	7.1	3.1	c	c
3	200.211	462	axe	stone	12.9	6.1	3.7	c	c
3	200.211	463	axe	stone	13.3	7.3	3.6	c	c
3	200.211	464	axe	stone	9.1	6.6	3.3	c	c
3	200.211	471	axe	stone	9.1	6	2.6	c	c
3	200.211	474	axe	stone	10	5.7	3.1	c	c
3	200.211	475	axe	stone	10.1	6.4	2.8	c	c
3	200.211	488	axe	stone	17.2	7.4	4.3	c	c
3	200.211	489	axe	stone	12	7	2.7	c	c
3	200.211	490	axe	stone	12.3	5.6	3.9	c	c

Phase	Context	Site Find no.	Class	Material	Length	Width	Thickness	Condition	Curation
3	200.211	492	axe	stone	6.9	3.2	2.4	c	c
3	200.211	504	axe	stone	13	6.2	3.7	c	c
3	200.211	507	axe	stone	15.4	7.2	4.1	c	c
3	200.211	508	axe	stone	12.1	6.5	4.3	b	c
3	200.211	1182	axe	stone	8.6	4.9	2.4	c	c
3	200.211	1277	axe	stone	3.4	5.8	3.3	b	c
3	200.211	1278	axe	stone	6	6.6	3.2	b	c
3	200.211	1281	axe	stone	10.4	5	3.4	c	c
3	200.211	526	axe-shaped grinder	stone	18.3	8.1	4.4	c	c
3	200.211	1198	axe-shaped grinder	stone	10.9	5.9	4.4	c	c
3	200.211	1297	axe-shaped grinder	stone	21.4	7.2	4.2	c	c
3	200.254	546	axe-shaped grinder	stone	10.7	6.9	2.9	c	c
3	200.151	537	bead	shell	3.5			b	c
3	200.151	544	bead	antler	2			b	c
3	200.151	1937	bead	shell	1.6			b	c
3	200.155	410	bead	shell	1.6			b	c
3	200.155	Cat. 280	bead	antler	2.4	1.1		b	c
3	200.173	Cat. 285	bead	antler	2.4	1.2		b	c
3	200.211	478	bead	shell	2.6			b	c
3	200.211	485	bead	shell	1.6			b	c
3	200.211	514	bead	shell	1.5			b	c
3	200.211	528	bead	antler	2.8			c	c
3	200.211	1184	bead	shell	0.8			b	c
3	200.211	1194	bead	antler	3.4			c	c
3	200.211	1195	bead	antler	3.1			c	c
3	200.211	1282	bead	antler	3.6			b	c
3	200.211	1283	bead	antler	3.9			c	c
3	200.211	1284	bead	antler	3.6			c	c
3	200.211	1288	bead	antler	2.7			b	c
3	200.211	1353	bead	antler	4.5			c	c
3	200.211	1984	bead	shell	1.8			b	c
3	200.211	Cat. 296	bead	antler	3.5	1.4		b	c
3	200.254	548	bead	antler	4.6			b	c
3	200.254	1957	bead	shell	1.2			b	c
3	200.270	1196	bead	shell	1.2			b	c
3	200.276	1948	bead	shell	1.4			b	c
3	200.276	1949	bead	shell	0.8			b	c
3	200.159/17	1482	bowl	stone	15.3	14.5	7.1	b	c
3	200.159/17	1487	bowl	stone				b	c
3	200.211	1473	bowl	stone	6.8	4.2	2	b	c
3	200.271	1299	bowl	stone	7.1	6.8	1.3	b	c
3	200.211	467	chisel	stone	5.7	2.5	1	c	c
3	200.211	1161	chisel	stone	5.3			b	c
3	200.151	521	conical stone	stone			7.8	c	c
3	200.211	1185	conical stone	stone	11.9	10.9	9.8	c	c
3	200.233	1273	conical stone	stone				c	c
3	200.151	518	fine abrader	stone	14.4	4.3	1	b	c
3	200.151	535	fine abrader	stone				b	c
3	200.211	498	fine abrader	stone	3.9	1.1	0.7	b	c
3	200.211	502	flaked tool	stone	16.3	8.2	3.1	c	c

Phase	Context	Site Find no.	Class	Material	Length	Width	Thickness	Condition	Curation
3	200.311	1406	grooved stone	stone	3.3	4.4	3.7	b	e
3	200.159/17	1488	hammerstone	stone	12.7	7.7	5.6	c	e
3	200.151	1977	hammerstone	stone	11	10.5	3.8	c	e
3	200.155	425	hammerstone	stone	4.9	3.9	2.1	c	e
3	200.211	511	hammerstone	stone	11.8	10.2	3.8	c	e
3	200.211	513	hammerstone	stone	11.7	9.5	3.6	c	e
3	200.211	525	hammerstone	stone	7.7	6.7	4.4	c	e
3	200.211	1186	hammerstone	stone	8.3	6.6	3.8	c	e
3	200.211	1474	hammerstone	stone	4.3	6.4	4.2	c	e
3	200.275	1414	hammerstone	stone	9.5	5.8	3.5	c	e
3	200.275	1415	hammerstone	stone	10.5	5.5	4.8	c	e
3	200.275	1416	hammerstone	stone	8	6.2	4	c	e
3	200.306	1401	hammerstone	stone	7	6	3.9	c	e
3	200.312	1405	hammerstone	stone	8.2	7.8	2.5	c	e
3	200.159	1178	hammerstone/grinder	stone	9.4	8.5	6.7	c	e
3	200.211	495	hammerstone/grinder	stone	11.1	9.3	4.4	c	e
3	200.211	510	hammerstone/grinder	stone	11.1	9.6	5.2	c	e
3	200.211	522	hammerstone/grinder	stone	10.8	9.2	5.1	c	e
3	200.233	1274	hammerstone/grinder	stone	12.9	11	6.1	c	e
3	200.233	1276	hammerstone/grinder	stone	10.7	8	5.1	c	e
3	200.254	547	hammerstone/grinder	stone	11.4	10.2	5.9	c	e
3	200.276	1290	hammerstone/grinder	stone	14.2	11.3	3.8	c	e
3	200.211	1197	human bone					na	na
3	200.211	469	jar stopper	stone	6.4			c	c
3	200.211	491	jar stopper	stone	8.3			b	c
3	200.151	480	lid	stone			2.9	c	e
3	200.151	520	lid	stone			3.1	c	e
3	200.151	523	lid	stone			1.3	c	e
3	200.151	532	lid	stone			3.3	c	e
3	200.151	533	lid	stone			2.9	c	e
3	200.211	473	lid	pottery	9.7		3.7	c	e
3	200.211	476	lid	stone			2.7	c	e
3	200.211	486	lid	stone	13.1	11.2	2.2	c	e
3	200.211	494	lid	stone			2.9	c	e
3	200.211	500	lid	stone			1.1	c	e
3	200.211	501	lid	stone			2.5	c	e
3	200.211	503	lid	stone	13.3	11.7	1.9	c	e
3	200.211	505	lid	stone	11.1	9.5	2.8	c	e
3	200.211	512	lid	stone			2.1	c	e
3	200.211	1379	lid	stone			4.9	c	e
3	200.211	1407	lid	stone	11.3	10.5	1.6	c	e
3	200.233	1275	lid	stone	13	11.8	4.1	c	e
3	200.263	1983	lid	stone	12.5	9.1	0.8	c	e
3	200.151	534	misc. object.	stone	5.5	3.2	1.8	b	?
3	200.211	1287	misc. object.	stone	5.7	5.5	2.8	b	?
3	200.211	1268	misc. object.	stone	18.7	12.5	3.2	c	?
3	200.151	1958	needle	bone	2.3			b	c
3	200.151	1960	needle	bone	0.7			b	c
3	200.151	1961	needle	bone	0.5			b	c
3	200.172	1294	needle	bone	1.7			b	c

Phase	Context	Site Find no.	Class	Material	Length	Width	Thickness	Condition	Curation
3	200.172	1971	needle	bone	0.8			b	c
3	200.172	1972	needle	bone	0.6	0.2	0.1	b	c
3	200.172	1974	needle	bone	1.2	0.3	0.2	b	c
3	200.172	1975	needle	bone	1.4	0.3	0.2	b	c
3	200.211	1183	needle	bone	2.6	0.3	0.3	b	c
3	200.211	1296	needle	bone	2.2	0.2	0.2	b	c
3	200.254	545	needle	bone	3			b	c
3	200.254	Cat. 300	needle	bone	1	0.2		b	c
3	200.254	Cat. 301	needle	bone	0.7	0.2		b	c
3	200.254	Cat. 302	needle	bone	0.6	0.2		b	c
3	200.254	Cat. 303	needle	bone	0.5	0.1		b	c
3	200.276	1946	needle	bone	1.2			b	c
3	200.172	2026	pebble grinder	stone	8.9	5	2.8	c	e
3	200.211	1978	pebble grinder	stone	9.5	4.5	1.7	c	e
3	200.211	1980	pebble grinder	stone	6.3	5.3	1.3	c	e
3	200.151	531	pendant	stone	5.1			b	c
3	200.173	1417	pendant	stone	1.8	0.8	0.4	b	c
3	200.211	1187	pendant	stone	6.7	3.1	0.6	c	c
3	200.211	1335	perforated stone	stone	5	4.2	1.5	c	c
3	200.155	424	pestle	stone	4.7	8.5	8.2	b	c
3	200.168	426	pestle	stone	21.6	5.8	7.2	c	c
3	200.211	472	pestle	stone	32.4	8.3	7.6	c	c
3	200.211	487	pestle	stone	29.8			c	c
3	200.211	1272	pestle	stone	17.1			b	c
3	200.321	1422	pestle	stone	18.4	7.8	7.3	c	c
3	200.211	1192	pivot stone	stone	24.5	21.8	13.6	c	e
3	200.151	483	point	bone	9.5	0.9	0.4	b	e
3	200.151	484	point	bone	7.4	1.5	0.5	b	e
3	200.151	519	point	bone	2.7	0.9	0.6	b	e
3	200.151	540	point	bone	14.7	1	0.6	b	e
3	200.211	509	point	bone	2.4			b	e
3	200.211	1193	point	bone	7.3	1.3	0.5	b	e
3	200.271	Cat. 312	point	bone	7.6	1.3		c	e
3	200.306	Cat. 315	point	bone	3.3	0.4		c	e
3	200.151	536	polisher	stone	5.4	4.6	1.2	c	e
3	200.180	272	polisher	stone	6.7	2.1	1.2	c	e
3	200.211	458	polisher	stone	7.4	2.4	1.5	c	e
3	200.151	539	pounder	stone	17.3	7.5	3.1	c	e
3	200.211	479	pounder	stone	15	5.1	7.1	b	e
3	200.211	496	pounder	stone	18.6	7.2	6.9	b	e
3	200.211	497	pounder	stone	24.2	5.8	8.4	b	e
3	200.211	1177	pounder	stone	5.4	5.2	4.7	c	e
3	200.270	1279	pounder	stone	11.6	5.3	2.7	c	e
3	200.270	1285	pounder	stone	6.3	5.8	5.5	c	e
3	200.306	1402	pounder	stone	11.8	12.1	9	c	e
3	200.311	1403	pounder	stone	7.8	6.3	6.3	b	e
3	200.211	1189	quern	stone	57	34.5	7.3	c	c
3	200.211	1190	quern	stone	55.9	36.6	3.4	c	c
3	200.211	1280	quern	stone	34.5	21.2	4.6	b	c
3	200.211	1292	quern	stone	73.3	38.2	4.1	c	c

Phase	Context	Site Find No.	Class	Material	Length	Width	Thickness	Condition	Curation
3	200.211	1472	quern	stone	16.2	14.1	4.4	b	c
3	200.294	1380	quern	stone	31.2	18.3	5.6	b	c
3	200.159/17	1483	rubber	stone	18.2	11.6	5	b	c
3	200.159	419	rubber	stone	13.2	13.4	4.7	b	c
3	200.211	1188	rubber	stone	43.2	15.4	7.9	c	c
3	200.211	1191	rubber	stone	46.4	16.6	7.1	b	c
3	200.211	1293	rubber	stone	25.7	12.8	2.4	b	c
3	200.271	1298	rubber	stone	17.1	13.5	4.2	b	c
3	200.159/17	1486	rubbing stone	stone	8.1	10.3	2.8	c	e
3	200.151	482	rubbing stone	stone	12.3	10.6	4	c	e
3	200.159	418	rubbing stone	stone	10.7	9.4	4	c	e
3	200.221	1341	rubbing stone	stone	14.9	9.4	4	c	e
3	200.211	468	semiperforated cone	stone			5.1	c	c
3	200.168	438	vessel	pottery	22	19	12.6	c	c
3	200.168	439	vessel	pottery	4	8	28.8	c	c
3	200.169	441	vessel	pottery				c	c
3	200.180	440	vessel	pottery				c	c
3	200.211	457	vessel	pottery			8.6	c	c
3	200.211	1180	vessel	pottery	4.1		8.6	c	c
3	200.222	1927	vessel	pottery			44	c	c
3	200.222	2014	vessel	pottery			17	c	c
3	200.223	2015	vessel	pottery	12	14	55	c	c
3	200.224	1926	vessel	pottery	35	38.5	17.5	c	c
3	200.225	1920	vessel	pottery	19	22	13.1	c	c
3	200.225	1921	vessel	pottery	22.8	23.2	17.2	c	c
3	200.227	2016	vessel	pottery	12	8	44	c	c
3	200.227	2017	vessel	pottery	14	10	39.4	c	c
3	200.227	2018	vessel	pottery	12			c	c
3	200.228	2019	vessel	pottery			25	c	c
3	200.228	2020	vessel	pottery	6		23	c	c
3	200.230/1	1918	vessel	pottery		4	16.8	c	c
3	200.232	1988	vessel	pottery			5	c	c
3	200.233	1917	vessel	pottery	18	7	10.8	c	c
3	200.233	1928	vessel	pottery	5.4		38	c	c
3	200.233	2021	vessel	pottery			8.6	c	c
3	200.234	1919	vessel	pottery	9	4.2	16.2	c	c
3	200.236	1929	vessel	pottery			13.3	c	c
3	200.238	1930	vessel	pottery			25	c	c
3	200.243	1923	vessel	pottery	21	6	14.3	c	c
3	200.244	1922	vessel	pottery	20		18	c	c
3	200.265	1925	vessel	pottery	31	7.7	21	c	c
3	200.266	1924	vessel	pottery	17.8	5.7	12.3	c	c
3	200.266	2024	vessel	pottery		8		c	c
3	200.287	2022	vessel	pottery	63.4	5.8	39	c	c
3	200.295	2023	vessel	pottery	41	4.4	31.4	c	c
3	200.211	Cat. 295	worked antler tine	antler	4.6	1.3		c	na
3	200.211	1286	worked shell?	shell	2.8	2.5	0.8	c	na
4	200.159/17	1484	anvil	stone	15.2	8.1	3.3	c	e
4	200.113	1261	axe	stone	5.2	7	3.5	b	c
4	200.113	353	bead	antler	2.9	1.6	1.5	c	c

Phase	Context	Site Find No.	Class	Material	Length	Width	Thickness	Condition	Curation
4	200.202	400	bead	shell	1.1			b	c
4	200.202	454	bead	shell	1.9			b	c
4	200.202	455	bead	shell	1.2			b	c
4	200.202	456	bead	shell	2.3			b	c
4	200.202	1478	bowl	stone	7	4.2	1.9	b	c
4	200.117	382	chisel	stone	3.4	1.1	0.8	c	c
4	200.202	1179	chisel	stone	4.7	2.1	1.7	b	c
4	200.202	1264	flaked tool	stone	3.9	4.9	2.1	b	c
4	200.117	1233	hammerstone	stone	9.6	10.9	3.6	b	e
4	200.202	1477	hammerstone	stone	7.1	4.5	4.3	c	e
4	200.202	1475	hammerstone/grinder	stone	9.7	3.9	5.3	b	e
4	200.202	1260	lid	stone	11.5	11.1	2.5	c	e
4	200.202	1476	misc. object	stone	5.5	5.5	4.2	c	na
4	200.113	1985	misc. sherd	pottery	2.1	1.7	0.2	b	c
4	200.117	379	needle	bone				b	c
4	200.117	380	needle	bone	2.1			b	c
4	200.202	1467	pestle	stone	3.8	3	0.9	b	c
4	200.113	1206	point	bone	4	1	0.7	b	e
4	200.113	403	pounder	stone	14.7	7.4	7	c	e
4	200.202	1466	rubbing stone	stone	10	12.2	4.2	b	e
4	200.117	396	spatula	bone	12.1	2.1	0.7	c	e
4	200.117	Cat. 281	worked antler tine	antler	8.2	2.1		c	na

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Phase	Context	Site Find No.	Class	Material	Length	Width	Thick	Condition	Curation
1,2	1.13	Cat. 49	perforated disc	pottery	4	3.3		b	c
1,2	1.15	Cat. 82	perforated stone	stone	3.1	2.6		b	c
3	1.11	54	perforated disc	pottery	5.2	3.2	1.3	b	c
3	1.11	55	point	bone	6	1.1	0.4	c	e
3	1.11	56	jar stopper	pottery	5.1		3.7	b	c
3	1.11	57	axe-shaped grinder	stone	12.8	5.7	3.7	c	c
3	1.11	61	perforated disc	pottery	6.2	3.2	0.7	b	c
3	1.11	62	chisel	stone	2.3	1.1	1	b	c
3	1.11	64	perforated disc	pottery	4.6	2.9	1.2	b	c
3	1.11	66	misc. object	stone	3.5			b	?
3	1.11	67	bowl	stone	5.3	2.9	1.4	b	c
3	1.11	76	perforated disc	pottery	4.9	3.1	0.9	b	c
3	1.11	80	bowl	stone	9.1	8.6	1.9	b	c
3	1.11	81	bowl	stone	11.8	9.2	1.5	b	c
3	1.11	82	bead	antler	3.1			b	c
3	1.11	160	misc. object	pottery	5.9	3.6	3.7	b	?
3	1.11	170	figurine	pottery	6.8	6	1.8	b	c
3	1.11	270	bead	antler	3.7			b	c

Phase	Context	Site Find No.	Class	Material	Length	Width	Thick	Condition	Curation
3	1.11	421	perforated disc	pottery	4.2	3.7	0.8	c	c
3	1.11	1243	perforated disc	pottery				c	c
3	1.11	1244	perforated disc	pottery	4.2	2.7	1.1	b	c
3	1.11	1990	worked antler	antler	15.8	2.5	2.1	b	na
3	1.11	2012	worked antler	antler	4.3			c	na
3	1.11	2013	worked antler	antler	7.1	2.4	2.1	b	na
3	1.11	Cat. 24	axe	stone	10.1	6	1.2	b	c
3	1.11	Cat. 25	misc. object	stone				b	?
3	1.11	Cat. 26	bowl	stone				b	c
3	1.11	Cat. 28	pounder	stone	12.2	5.2	2.1	c	e
3	1.11	Cat. 30	rubbing stone	stone	12.1	3.6	2.1	c	e
3	1.11	Cat. 31	hammerstone	stone				c	e
3	1.11	Cat. 32	bowl	stone				b	c
3	1.11	Cat. 33	misc. object	stone				b	?
3	1.11	Cat. 35	bowl	stone	8.7		6.1	b	c
3	1.11	Cat. 50	perforated disc	pottery	5.3	2.6	1	b	c
3	1.11	Cat. 51	perforated disc	pottery	3.7	2.8		b	c
3	1.11	Cat. 52	misc. object	stone	4.7	1.9		b	?
3	1.11	Cat. 76	bowl	stone	5.8		2.9	b	c
3	1.11	Cat. 77	cupped stone	stone	10.3	6.2		b	e
3	1.11	Cat. 78	pestle	stone	6.9	4		b	c
3	1.11	Cat. 80	cupped stone	stone	16.4	15		c	e
3	1.11	Cat. 81	bowl	stone			8.2	b	c
3	1.11	Cat. 84	misc. object	stone	5.3	3.6		b	?
3	1.11	Cat. 85	bowl	stone	6.6		2.6	b	c
3	1.11	Cat. 240	antler debitage	antler	5.3			b	na
3	1.11	Cat. 241	antler debitage	antler	10.3	5.7		b	na
3	1.11	Cat. 241	antler debitage	antler	5.8	3.9		b	na
3	1.11	Cat. 242	antler debitage	antler	3.2			b	na
3	1.11	Cat. 242	worked antler tine	antler	6.1			c	na
3	1.11	Cat. 242	worked antler tine	antler	3.5			c	na
3	1.11	Cat. 262	antler debitage	antler	4.4	3.8		b	na
4	1.03	18	grooved stone	stone	5.7			c	e
4	1.05	23	bowl	stone	9.8	8.6	3	b	c
4	1.05	24	anvil	stone	12.2	11.8	4.3	c	e
4	1.05	25	chisel	stone	3.5	3.2	1.4	c	c
4	1.05	29	cupped stone	stone	10.7	9.1	5.6	c	e
4	1.05	30	anvil	stone	11.5	10.3	5.4	c	e
4	1.05	34	needle	bone	3.5	0.3	0.2	c	c
4	1.05	35	bead	antler	3.1			c	c
4	1.05	40	misc. object	stone	2.6			b	?
4	1.05	41	misc. object	stone	12	7.1	3.9	b	?
4	1.05	44	pendant?	stone	1.9			b	c
4	1.05	48	perforated disc	pottery	4.9	2.7	1.1	b	c
4	1.05	49	bowl	stone	7.5	7	1.5	b	c
4	1.05	52	figurine	stone	4	2.7	0.7	b	c
4	1.05	58	figurine	pottery	10	3.1	2.1	b	c
4	1.05	59	figurine	pottery	3.1	2	1.8	b	c
4	1.05	60	perforated disc	pottery	5.2	4.2	1	b	c
4	1.05	63	perforated stone	stone	7.8			c	c

Phase	Context	Site Find No.	Class	Material	Length	Width	Thick	Condition	Curation
4	1.05	71	misc. object	pottery	5.2	3.8	1.8	b	?
4	1.05	72	figurine	pottery	4.8	5	2.9	b	c
4	1.05	73	cupped stone	stone	10.3		4.9	c	e
4	1.05	74	figurine	pottery	7.2	6	4.8	b	c
4	1.05	75	bowl	stone	7.2	6.4	1.9	b	c
4	1.05	79	figurine	pottery	2.8	3.1	3.6	b	c
4	1.05	86	misc. object	pottery	9.8	8.6	1.2	b	c
4	1.05	87	vessel	pottery	22	5.8	8.5	b	c
4	1.05	88	misc. object	pottery	5.8	5.2	1.4	b	?
4	1.05	151	bowl	stone	4.5	4.3	1.1	b	c
4	1.05	224.01	vessel	pottery	4.7	3.3	2.9	b	c
4	1.05	224.02	vessel	pottery	6.7	3.1	3.1	b	c
4	1.05	280	point	bone	3.4	0.5	0.3	c	e
4	1.05	1240	perforated disc	pottery	3.5	2.7	1	b	c
4	1.05	1901	haft	antler	6.7	2.9	1	b	c
4	1.05	1915	worked antler	antler	8.5	1.6	1	b	na
4	1.05	1973	needle	bone	2.4			b	c
4	1.05	1989.01	worked bone	bone	3.4	1.5	0.5	b	na
4	1.05	1989.02	worked bone	bone	3.2	1.3	0.4	b	na
4	1.05	1996	worked antler	antler	12.1			b	na
4	1.05	1997	pick	antler	43			c	e
4	1.05	2006	point	bone	2.8	1.2	8.7	b	e
4	1.05	2010	worked antler	antler	3.4	1.8	0.7	b	NA
4	1.05	Cat. 9	pestle	stone	11.2	9	8.8	b	c
4	1.05	Cat. 10	axe	stone	6.4	6.2	2.1	b	c
4	1.05	Cat. 11	hammerstone	stone	8.2	6.7	4.4	c	e
4	1.05	Cat. 12	rubber	stone	10.6		9	b	c
4	1.05	Cat 14	bowl	stone				b	c
4	1.05	Cat. 15	quern	stone	16.1	7.8	2.6	b	c
4	1.05	Cat 19	bowl	stone				b	c
4	1.05	Cat. 48	perforated stone	stone	7.8	4.1		c	c
4	1.05	Cat. 62	perforated disc	pottery	4.8	2.9	1.1	b	c
4	1.05	Cat. 63	bowl	stone			5.6	b	c
4	1.05	Cat. 64	hammerstone	stone	5.2	7	3.2	b	e
4	1.05	Cat. 65	cupped stone	stone	8.8	12.2	5.6	b	e
4	1.05	Cat. 66	quern	stone	9.8		2.2	b	c
4	1.05	Cat. 67	perforated disc	pottery	3.9	2.7	0.7	b	c
4	1.05	Cat. 68	bowl	stone	8.1	7	4.1	b	c
4	1.05	Cat. 69	pounder	stone	11	2.9		c	e
4	1.05	Cat. 70	perforated disc	pottery	5.8	3.2	1.2	b	c
4	1.05	Cat. 71	pounder	stone	7.2	2.8		b	e
4	1.05	Cat. 72	adze	stone	4.5	5.5	1.4	b	c
4	1.05	Cat. 73	misc. object	stone	3.7	1.9		b	?
4	1.05	Cat. 75	perforated stone	stone	6.7	3.4		b	c
4	1.05	Cat. 79	bowl	stone	9	8.8		b	c
4	1.05	Cat. 239	antler debitage	antler	3.4			b	na
4	1.05	Cat. 239	antler debitage	antler	5.3			b	na
4	1.05	Cat. 261	antler debitage	antler	5.1			b	na
4	1.05	Cat. 400	vessel	pottery	44	44	9.9	c	c
5	1.0	5	axe	stone	8	4.2	3.2	c	c

Phase	Context	Site Find No.	Class	Material	Length	Width	Thick	Condition	Curation
5	1.0	274.01	needle	bone	2.3	0.4	0.3	b	c
5	1.0	274.02	needle	bone	1.4	0.2	0.1	b	c
5	1.0	356	point	bone				c	e
5	1.0	1218	pebble	stone	5.3	2.7	2	c	na
5	1.01	42	hammerstone/grinder	stone	10.7	8.9	4	c	e
5	1.01	45	flaked tool	stone	11.4	5.9	1.8	c	c
5	1.01	46	bead	antler	5.5			c	c
5	1.01	65	perforated disc	pottery	4.6	2.6	1	b	c
5	1.01	1999	haft	antler	3.1			b	c
5	1.01	2000	haft	antler	4.3			b	c
5	1.01	Cat. 16	axe	stone	7.1	5.6	3.9	b	c
5	1.01	Cat. 18	bowl	stone				c	c
5	1.02	6	bead	antler	3.5			c	c
5	1.02	7	misc. object	stone	1.9			b	?
5	1.02	8	misc. object	stone	6.9	3.3	1	b	?
5	1.02	9	figurine	pottery	4.8	5.1	3.6	b	c
5	1.02	11	worked antler	antler	2.2		1.1	c	na
5	1.02	12	bowl	stone	7.2	10.7	2.2	b	c
5	1.02	13	axe	stone	8	5.5	3.3	c	c
5	1.02	14	perforated disc	pottery	4.7	3	1.1	b	c
5	1.02	15	axe	stone	2.9	3.3	1.2	b	c
5	1.02	16	figurine	pottery	2.8	2.7	2.1	b	c
5	1.02	17	bowl	stone	15.2	12.5	1.9	b	c
5	1.02	20	point	bone	2.6	1	0.6	b	e
5	1.02	21	perforated disc	pottery			1.3	c	c
5	1.02	22	perforated disc	pottery	4.7	3.3	1	b	c
5	1.02	50	worked antler	antler	9.1			c	na
5	1.02	1245	perforated disc	pottery	5.6	5	1	b	c
5	1.02	1246	perforated disc	pottery	4	3.8	0.9	b	c
5	1.02	1247	perforated disc	pottery	4.9	3.7	1.5	b	c
5	1.02	1998	point	antler	5.2	1.7	0.8	b	e
5	1.02	Cat. 1	misc. object	stone				b	?
5	1.02	Cat. 2	misc. object	stone	9.4	7.6	3.4	b	?
5	1.02	Cat. 3	quern	stone	19.8	10.6	1.8	b	c
5	1.02	Cat. 4	bowl	stone				c	c
5	1.02	Cat. 5	bowl	stone	10.6	7.2	7.2	b	c
5	1.02	Cat. 6	bowl	stone	7.3	3	4.6	b	c
5	1.02	Cat. 20	axe	stone	7.7	3.8	1.7	b	c
5	1.02	Cat. 21	hammerstone	stone				c	e
5	1.02	Cat. 22	axe	stone				b	c
5	1.02	Cat. 23	axe	stone	5.7	3.8	1.5	b	c
5	1.02	Cat. 27	misc. object	stone	1.6	0.9		b	?
5	1.02	Cat. 258	antler debitage	antler	13.6	5.7		b	na
5	1.02	Cat. 258	antler debitage	antler	5.7	1.6		b	na
5	1.02	Cat. 260	antler debitage	antler	10.1	3.3		b	na
5	1.03	171	figurine	pottery	6.9	4.4	4.3	b	c
5	1.04	19	worked antler	antler	3.1			c	na
5	1.04	2007	point	bone	4	0.7	0.5	b	e
5	1.09	Cat. 8	bowl	stone				b	c

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PHASE	CONTEXT	SITE FIND No.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	CONDITION	CURATION
2	16.7	242	bead	antler	4.1			b	c
2	16.7	243	haft	antler	6.6	3.2	2	c	c
2	16.7	245	bowl	stone	30		3.3	c	c
2	16.7	246	bead	antler	4.9			c	c
2	16.7	247	needle	bone	3.5			b	c
2	16.7	248	adze	stone	3.3	3.4	1	c	c
2	16.7	249	adze	stone	3.2	1.4	0.7	b	c
2	16.7	252	perforated disc	pottery	6.8	5.8	1.5	b	c
2	16.7	253	bead	antler	4.1			b	c
2	16.7	254	haft	antler	5	2.2	1.8	c	c
2	16.7	256	needle	bone	3.3	3		b	c
2	16.7	264	pendant	stone	8.6	8.9	0.7	b	c
2	16.7	265	perforated disc	pottery	6.1	6	1.2	b	c
2	16.7	266	spindle whorl	stone	2.5	2.4	2.1	c	c
2	16.7	267	adze	stone	6.2	6.1	1.5	b	c
2	16.7	279	needle	bone	1.5			b	c
2	16.7	1979	adze	stone	5.2	3.1	1.3	b	c
2	16.7	1994	spatula	bone	2.8	0.9	0.6	b	c
2	16.7	1995	needle	bone	4			b	c
2	16.7	2005	point	bone	3.1	1.4	4.5	b	c
2	16.7	2008	needle	bone	1.3	0.2	0.1	b	c
2	16.7	2009	needle	bone	1.2	0.3	0.1	b	c
2	16.7	Cat. 263	antler debitage	antler	2.5			c	e
3	16.4	165	misc. object	stone	5.9	4.9	2.2	b	e
3	16.4	166	figurine	pottery	9.9	4	3.6	b	c
3	16.4	167	chisel	stone	4.4	1.5	1.1	b	c
3	16.4	168	axe	stone	7.1	4.6	3.2	b	c
3	16.4	169	axe	stone	6	6.7	2.4	b	c
3	16.4	173	hammerstone	stone			3.4	c	e
3	16.4	174	figurine	pottery	3.6	2.4	2.3	b	c
3	16.4	175	perforated stone	stone	7.4	3.7	2	b	e
3	16.4	176	conical stone	stone			10.6	c	c
3	16.4	177	bowl	stone	11	6	2.1	b	c
3	16.4	178	bowl	stone	8.9	7	2.1	b	c
3	16.4	179	bowl	stone	8.3	7.1	2.7	b	c
3	16.4	180	axe-shaped grinder	stone	12.1	7.6	4.2	c	c
3	16.4	182	misc. object.	stone	6.1	5.8	2.5	b	e
3	16.4	183	rubber	stone	12.1	7.6	4.2	b	c
3	16.4	184	polisher	stone	6	6.4	3	b	e
3	16.4	186	fine abrader	stone	6	1.8	0.7	c	c
3	16.4	187	conical stone	stone	8.3	5.9	4.2	b	c
3	16.4	188	figurine	pottery	4.8	2.3	2	b	c
3	16.4	189	figurine	pottery	9.4	10	2.9	b	c
3	16.4	190	figurine	pottery	3.6	2.6	1.5	b	c
3	16.4	191	rubbing stone	stone	15.4	13.4	4	c	e
3	16.4	194	bowl	stone	14.6	11.4	4.1	b	c
3	16.4	195	rubber	stone	10.4	12.3	8.2	b	c

Phase	Context	Site Find No.	Class	Material	Length	Width	Thickness	Condition	Curation
3	16.4	196	hammerstone/grinder		15.5	8.7	5.2	c	e
3	16.4	197	axe-shaped grinder	stone	9.5	5.7	2.3	c	c
3	16.4	198	cupped stone	stone	11.7	9.4	9.6	c	e
3	16.4	199	bowl	stone			2.5	c	c
3	16.4	200	conical stone	stone	8.5	6.8	6.3	b	c
3	16.4	201	point	bone	9.1	0.5	0.3	c	e
3	16.4	202	hammerstone/grinder	stone	7.1	7	4.8	c	e
3	16.4	203	conical stone	stone	7.9	5.4	4	c	c
3	16.4	204	hammerstone/grinder	stone	10.4	8.9	4.4	c	e
3	16.4	205	pounder	stone	6.3	6.1	5.9	c	e
3	16.4	206	bowl	stone	25	13.8	2.6	b	c
3	16.4	207	chisel	stone	6.6	1.4	0.9	c	c
3	16.4	208	haft	antler	4.8	2.8	2.3	b	c
3	16.4	210	perforated disc	pottery	6.8	6.5	1.3	b	c
3	16.4	210	perforated disc	pottery	5.4	4.6	1.7	b	c
3	16.4	211	bowl	stone	4	5.7	1.2	b	c
3	16.4	212	adze	stone	8.1	5.6	1.2	c	c
3	16.4	213	adze	stone	3.3	3	0.7	c	c
3	16.4	216	hammerstone/grinder	stone	11.1	10.3	4.3	c	e
3	16.4	217	hammerstone	stone	8.7	5.5	5.4	c	e
3	16.4	218	conical stone	stone	13.5	10.3	11.5	c	c
3	16.4	219	bowl	stone	10.2	7.1	2.5	c	c
3	16.4	220	pendant?	stone	6.1	3	0.7	c	c
3	16.4	221	bead	antler	5			b	c
3	16.4	221	bead	antler	4.9			b	c
3	16.4	221	bead	antler	3.9			b	c
3	16.4	221	bead	antler	4.7			c	c
3	16.4	222	flaked tool	stone	7.6	4.3	1.2	c	e
3	16.4	228	perforated disc	pottery	4.4	2.7	1.1	b	c
3	16.4	229	misc. object	pottery	4.3	4.2	3.3	b	e
3	16.4	230	adze	stone	6.4	4.3	1.2	c	c
3	16.4	231	axe	stone	8	6.5	3.3	b	c
3	16.4	233	bead	antler	5.5			c	c
3	16.4	234	conical stone	stone	11.2	6.8	8.4	c	c
3	16.4	235	misc. object	fossil	4.8	4.6	2.9	c	e
3	16.4	236	perforated disc	pottery	5.8	5.3	1	c	e
3	16.4	237	hammerstone/grinder	stone	10.1	6.3	7.7	b	e
3	16.4	238	conical stone	stone	14.3	12.3	10.2	c	c
3	16.4	241	figurine	pottery	3.1	1.8	1.4	b	c
3	16.4	258	bowl	stone	7.9	6.3	2	b	c
3	16.4	275	bead	antler	2.5	1.3	0.6	b	c
3	16.4	276	needle	bone	3.4	0.3	0.1	b	c
3	16.4	276	needle	bone	1.4			b	c
3	16.4	276	point	bone	3.2	0.9	0.8	b	c
3	16.4	276	point	bone	1.6	0.5	0.4	b	c
3	16.4	276.1	needle	bone	2.9			b	c
3	16.4	277	needle	bone	2.4	0.2	0.2	b	c
3	16.4	277	needle	bone	1.4			b	c
3	16.4	2002	spatula	bone	10.3	1.8	0.9	b	c
3	16.4	2004	haft	antler	14.2	6.9		b	c

Phase	Context	Site Find No.	Class	Material	Length	Width	Thickness	Condition	Curation
3	16.4	Cat. 163	pestle	stone				b	c
3	16.4	Cat. 164	hammerstone/grinder	stone				c	e
3	16.4	Cat. 165	bowl	stone			5.8	b	c
3	16.4	Cat. 166	misc. object	stone	4.9	2	2.1	b	e
3	16.4	Cat. 167	misc. object	stone	6.2	5.3	3.1	b	e
3	16.4	Cat. 168	axe	stone	6	5.9	3.6	b	c
3	16.4	Cat. 169	hammerstone	stone	6.4	6.1	2.5	b	e
3	16.4	Cat. 170	axe	stone	8.1	5.5	4.1	b	c
3	16.4	Cat. 171	misc. object	stone				b	e
3	16.4	Cat. 172	hammerstone/grinder	stone	12		5	c	e
3	16.4	Cat. 173	pounder	stone	9.5	5.2	3.8	b	e
3	16.4	Cat. 174	misc. object	stone	9.8	8.2	4.2	b	e
3	16.4	Cat. 175	rubbing stone	stone	4.2	6.8	2.5	b	e
3	16.4	Cat. 177	axe	stone	5.8	7	3.8	b	c
3	16.4	Cat. 178	axe	stone	4	5.2	3.2	b	c
3	16.4	Cat. 179	axe	stone	5.6	3.6	1.9	b	c
3	16.4	Cat. 180	misc. object	stone				b	e
3	16.4	Cat. 181	misc. object	stone	4	4.1	1.1	b	e
3	16.4	Cat. 182	axe	stone	4.8	5.2	3.8	b	c
3	16.4	Cat. 183	axe	stone	3.6	3.9	1.5	b	c
3	16.4	Cat. 184	axe	stone	6.6	5.8	3.6	b	c
3	16.4	Cat. 185	axe	stone	9.4	6.1	4.6	b	c
3	16.4	Cat. 186	pounder	stone	10.7	5	3	c	e
3	16.4	Cat. 187	hammerstone	stone	15	11.1	3.7	c	e
3	16.4	Cat. 188	bowl	stone			7.8	b	c
3	16.4	Cat. 189	cupped stone	stone	12.2	10.3	5.1	c	e
3	16.4	Cat. 191	hammerstone	stone	10.4	6.2	2.5	c	e
3	16.4	Cat. 192	axe	stone	6.9	4.4	3.2	b	c
3	16.4	Cat. 193	hammerstone	stone	9.1	6.8	3	c	e
3	16.4	Cat. 194	pestle	stone	3	8.9	8	b	c
3	16.4	Cat. 195	misc. object	stone	7.2	4.2	2	b	e
3	16.4	Cat. 196	pounder	stone	10.1	3.4	2.5	c	e
3	16.4	Cat. 197	bowl	stone	12.1		5.4	b	c
3	16.4	Cat. 198	bowl	stone				b	c
3	16.4	Cat. 199	hammerstone	stone	12.8	12.7	2.8	c	e
3	16.4	Cat. 201	hammerstone/grinder	stone	13.8	10	5.2	b	e
3	16.4	Cat. 202	axe	stone				b	c
3	16.4	Cat. 203	axe	stone				b	c
3	16.4	Cat. 204	axe	stone				b	c
3	16.4	Cat. 205	axe	stone	7	6.4	1.8	b	c
3	16.4	Cat. 206	flaked tool	stone	6.2	6.6	2	b	e
3	16.4	Cat. 207	rubber	stone	14.8		3.8	b	c
3	16.4	Cat. 208	misc. object	stone	7.4	7.4	2.3	b	e
3	16.4	Cat. 209	axe	stone	7.2	3	1.5	b	c
3	16.4	Cat. 210	hammerstone	stone	7.1	6.4	3.6	c	e
3	16.4	Cat. 211	pestle	stone	7.5	5.8	4.7	b	c
3	16.4	Cat. 212	hammerstone	stone	7.4	6.2	4.4	c	e
3	16.4	Cat. 213	pestle	stone	7.2	7.4	7	b	c
3	16.4	Cat. 214	misc. object	stone	6	5.2	4.1	b	e
3	16.4	Cat. 215	axe	stone	5.9	5.6	3.2	b	c

Phase	Context	Site Find No.	Class	Material	Length	Width	Thickness	Condition	Curation
3	16.4	Cat. 216	misc. object	stone				b	e
3	16.4	Cat. 217	misc. object	stone	8.1	9.9	1.8	b	e
3	16.4	Cat. 218	misc. object	stone				b	e
3	16.4	Cat. 219	pounder	stone	6	5.8	5.2	c	e
3	16.4	Cat. 220	misc. object	stone	5.2	6.7	3	b	e
3	16.4	Cat. 221	axe	stone	7.6	5.9	1.4	c	c
3	16.4	Cat. 223	misc. object	stone	5.1	6.2	1.4	b	e
3	16.4	Cat. 224	quern	stone				b	c
3	16.4	Cat. 225	misc. object	stone				b	e
3	16.4	Cat. 226	misc. object	stone				b	e
3	16.4	Cat. 227	pounder	stone	11.1	6.1	4.4	b	e
3	16.4	Cat. 228	axe	stone	4.6	5.2	1.2	b	c
3	16.4	Cat. 229	axe	stone	4.5	3.9	1.7	b	c
3	16.4	Cat. 230	flaked tool	stone	7.1	4	1.5	c	e
3	16.4	Cat. 231	hammerstone	stone	9.9	8.5	3.1	c	e
3	16.4	Cat. 232	polisher	stone	5.4	3.6	3	b	e
3	16.4	Cat. 233	cupped stone	stone	10.4	11	4.8	b	e
3	16.4	Cat. 234	pestle	stone	12	6.2	6.2	c	c
3	16.4	Cat. 234	pestle	stone	11.9	6.7	4.7	c	c
3	16.4	Cat. 249	antler debitage	antler	5.1			c	na
3	16.4	Cat. 249	antler debitage	antler	5.2			c	na
3	16.4	Cat. 249	antler debitage	antler	4.8			c	na
3	16.4	Cat. 251	antler debitage	antler	17.9			c	na
3	16.4	Cat. 403	vessel	pottery	11.5		10.2	c	c
4	16.0	51	pendant?	stone	3.7	1.6	1.2	c	c
4	16.0	89	figurine	pottery	5	3.7	4.6	b	c
4	16.0	95	bowl	stone	10.8	10.1	7	c	c
4	16.0	96	pendant	stone	1.7			b	c
4	16.0	125	misc. object	stone	11.8	3.3		b	e
4	16.0	148	chisel	stone	3.6	1.7	0.6	c	c
4	16.0	149	zoomorphic vessel		12.1	8.8	5.1	c	c
4	16.0	150	pounder	stone	15.1	5.3	4.6	c	e
4	16.0	156	axe	stone	6.6	5.3	1.3	b	c
4	16.0	157	adze	stone	6.1	4.7	1.1	c	c
4	16.0	185	bowl	stone	9.3	4.8	3.3	b	c
4	16.0	240	pendant	stone	2.2	1.3	0.9	c	c
4	16.0	271	polisher	stone	4.2	2.7	1.1	c	e
4	16.0	288	bowl	stone	27	15.6	5.9	c	c
4	16.0	289	spatula	bone	15.1	1	0.4	c	c
4	16.0	290	perforated disc	pottery			1.2	c	c
4	16.0	292	rubbing stone	stone	14	8.1	3.8	b	e
4	16.0	293	rubbing stone	stone	10.9	9.3	4.1	c	e
4	16.0	1991	point	bone	5.9	1.4	0.8	b	c
4	16.0	2003	point	bone	4.7	11.7	0.6	b	c
4	16.0	2028	misc. object	stone	4.3	3	1	b	e
4	16.0	Cat. 43	perforated stone	stone	10.2	3.2		b	e
4	16.0	Cat. 88	misc. object	stone	4.8	3.9	0.9	b	e
4	16.0	Cat. 89	flaked tool	stone	7.2	6.2	2.4	b	e
4	16.0	Cat. 90	pestle	stone	5.8	5.5	3.9	b	c
4	16.0	Cat. 91	misc. object	stone	5.6	4	0.6	b	e

Phase	Context	Site Find No.	Class	Material	Length	Width	Thickness	Condition	Curation
4	16.0	Cat. 93	axe	stone	8	3.9	1.2	b	c
4	16.0	Cat. 94	flaked tool	stone	7.1	6.2		b	e
4	16.0	Cat. 95	misc. object	stone	6.2	6.4		b	e
4	16.0	Cat. 100	misc. object	stone	7.4	5.4	5.2	b	e
4	16.0	Cat. 101	quern	stone	13	16	2.8	b	c
4	16.0	Cat. 122	pounder	stone	6.7	6.1	6.1	c	e
4	16.0	Cat. 126	polisher	stone	4.1	2.6	0.9	c	e
4	16.0	Cat. 127	axe	stone	2.4	4.8	1.2	b	c
4	16.0	Cat. 128	flaked tool	stone	6.8	4.1	1.7	c	e
4	16.0	Cat. 129	axe	stone	6	7.6	2.8	c	c
4	16.0	Cat. 130	hammerstone/grinder	stone	14	6.8	7.3	c	e
4	16.0	Cat. 131	pestle	stone	13	7.6	2.6	c	c
4	16.0	Cat. 132	rubber	stone	20.8	10.1	5	b	c
4	16.0	Cat. 133	pounder	stone	12.2	6	4.9	c	e
4	16.0	Cat. 151	flaked tool	stone	10	6.2	3	c	e
4	16.0	Cat. 152	pounder	stone	13.6	4.8	3.8	c	e
4	16.0	Cat. 153	pestle	stone	9.6	5.9	5.2	b	c
4	16.0	Cat. 155	bowl	stone	8.8		5.4	b	c
4	16.0	Cat. 156	bowl	stone	8.9		5.2	b	c
4	16.0	Cat. 157	hammerstone	stone	14.6	16.2	7.8	b	e
4	16.0	Cat. 158	bowl	stone	13.6	7.4	5.4	b	c
4	16.1	105	pendant	stone	1.2			b	c
4	16.1	106	figurine	stone	5.7	1.7	1.5	c	c
4	16.1	108	pounder	stone	15	7.6	4	c	e
4	16.1	111	hammerstone/grinder	stone	14.8	9.7	4.6	c	e
4	16.1	114	chisel	stone	3	1.3	1.1	b	c
4	16.1	115	axe	stone	6.8	6.1	3.7	b	c
4	16.1	116	axe	stone	8.3	6.2	2.8	b	c
4	16.1	117	cupped stone	stone	13.5	12.4	6.7	b	e
4	16.1	121	chisel	stone	4.4	2.5	1.4	c	c
4	16.1	122	bowl	stone	13.9	11.3	1.9	b	c
4	16.1	123	adze	stone	5.6	4.9	1.9	b	c
4	16.1	124	vessel	pottery	8.5		2.5	b	c
4	16.1	127	rubbing stone	stone	8.4	6.3	3	c	e
4	16.1	128	hammerstone/grinder	stone	7.4	6.3	2.8	b	e
4	16.1	129	adze	stone	5	7	1.5	b	c
4	16.1	131	perforated disc	pottery	3.8	2.4	1.2	b	c
4	16.1	132	perforated disc	pottery	3.5	3.1	1.2	b	c
4	16.1	133	needle	bone	2.8			b	c
4	16.1	134	needle	bone	8.9			b	c
4	16.1	135	bead	antler	3.5			b	c
4	16.1	140	tube	bone	2.9			c	c
4	16.1	141	rubbing stone	stone	9	8.6	2.1	b	e
4	16.1	142	rubbing stone	stone	8.3	4.7	3	c	e
4	16.1	181	adze	stone	6.5	5.4	1.2	c	c
4	16.1	223	misc. object	pottery	9	5.2	1.2	b	e
4	16.1	Cat. 111	bowl	stone	6.6		7	b	c
4	16.1	Cat. 112	chisel	stone	5.3	3	2.7	b	c
4	16.1	Cat. 113	rubbing stone	stone	7.8	6.4	3.1	b	e
4	16.1	Cat. 115	hammerstone/grinder	stone	10.6	6.2	3.4	b	e

Phase	Context	Site Find No.	Class	Material	Length	Width	Thickness	Condition	Curation
4	16.1	Cat. 116	hammerstone	stone	7	6.2	3.6	c	e
4	16.1	Cat. 117	quern	stone	19.2	9.2	4.1	b	c
4	16.2	126	adze	stone	4.5	6.2	1.9	b	c
4	16.2	136	needle	bone	2.2			b	c
4	16.2	137	needle	bone	4.7			b	c
4	16.2	138	adze	stone	5.3	3.7	1	b	c
4	16.2	143	axe	stone	5.4	6.6	1.2	b	c
4	16.2	144	hammerstone	stone	9.8	5.8	4.2	c	e
4	16.2	145	chisel	stone	4.2	2.2	1	c	c
4	16.2	146	pounder	stone	11.8	6.7	3.6	c	e
4	16.2	147	axe-shaped grinder	stone	9.1	6.4	3.4	b	c
4	16.2	155	figurine	pottery	5.5	4	3.1	b	c
4	16.2	158	hammerstone/grinder	stone	9.2	7.9	4.1	c	e
4	16.2	159	flaked tool	stone	8.5	5.4	1.8	c	e
4	16.2	161	adze	stone	6.8	5.4	2.1	b	c
4	16.2	162	pestle	stone	12	4.9	4.7	c	c
4	16.2	163	needle	bone	3.2	0.2	0.1	b	c
4	16.2	164	pounder	stone	9.9	3.6	3.2	c	e
4	16.2	1992	worked pig tusk	bone				c	na
4	16.2	Cat. 114	flaked stone	stone	7.4	6.6	6	b	e
4	16.2	Cat. 134	hammerstone/grinder	stone	7.2	7.6	5	b	e
4	16.2	Cat. 136	misc. object	stone	5.8	5.9	1.8	b	e
4	16.2	Cat. 137	chisel	stone	5.1	2.6	1.1	b	c
4	16.2	Cat. 140	quern	stone	20.2	15.8	6.8	b	c
4	16.2	Cat. 141	quern	stone	24.5	15.1	4.8	b	c
4	16.2	Cat. 142	bowl	stone	14.2	14.2	8.2	c	c
4	16.2	Cat. 246	antler debitage	antler	14.7			c	na
4	16.3	Cat. 147	rubber	stone	11.2		2.4	c	c
4	16.3	Cat. 148	rubber	stone	10.1	11.3	3	b	c
4	16.3	Cat. 149	axe	stone	8	4.9	2.1	b	c
4	16.3	Cat. 150	axe	stone	7.4	4.7	2.9	b	c
4	16.3	Cat. 154	axe	stone	2.9	3.1	2.9	b	c
4	16.3	Cat. 159	hammerstone	stone	7.5	6.3	3.6	c	e
4	16.3	Cat. 161	misc. object	stone	8.3	4.6	1	b	e
4	16.3	Cat. 162	pestle	stone	6.4	4.2	3.6	b	c
4	16.3	Cat. 190	bowl	stone	12		7.6	b	c
4	16.3	Cat. 247	worked bone	bone	6.5			c	na
4	16.6	232	figurine	pottery	5.7	4.4	3.3	b	c
5?	16.6	239	needle	bone	3.6	0.4	0.3	b	c
5?	16.6	278	point	bone	4	0.7	0.4	b	c
5?	16.8	250	chisel	stone	5.6	2.4	2	c	c
5?	16.8	251	pendant	stone	3.4	1	0.9	c	c
5?	16.8	259	pendant	clay	2.9	2	1.2	b	c
5?	16.8	260	axe	stone	11.3	7.5	3.3	c	c
5?	16.8	262	pestle	stone	12.5	7.2	5.6	b	c
5?	16.8	263	hammerstone	stone	8.3	5.4	4.5	b	e

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CONTEXT	SITE FIND No.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	CONDITION	CURATION
24.0	94	adze	stone	4.4	4.2	1.4	b	c
24.0	97	coin	metal				c	c
24.0	Cat. 92	hammerstone	stone	11	10.4	2.8	c	e
24.0	Cat. 96	hammerstone/grinder	stone	8	5.6	3	c	e
24.0	Cat. 399	vessel	pottery	9	6.3	6.6	b	c
24.1	100	misc	pottery	3.6	2.4	2.3	b	?
24.1	107	hammerstone/grinder	stone	8.3	8.8	3.6	c	e
24.1	109	figurine	pottery	3.8	3	3.4	b	c
24.1	110	haft	antler	8.9	3.3	0.5	b	c
24.1	130	vessel	pottery	5		2.2	b	c
24.1	192	perforated disc	pottery	4.4	2.2	0.9	b	e
24.1	192	perforated disc	pottery	5.5	2.8	1.1	b	e
24.1	192	perforated disc	pottery	4.5	5.1	1.1	b	e
24.1	192	perforated disc	pottery	4.5	3.2	1.1	b	e
24.1	Cat. 98	hammerstone	stone	8	7.1	5.5	c	e
24.1	Cat. 99	hammerstone/grinder	stone				?	e
24.1	Cat. 102	quern	stone				?	c
24.1	Cat. 103	hammerstone	stone				?	e
24.1	Cat. 104	misc. object	stone				?	na
24.1	Cat. 105	hammerstone/grinder	stone				?	e
24.1	Cat. 106	pestle	stone	8.2	5.9	5.7	b	c
24.1	Cat. 107	hammerstone	stone stone	8.2	6.8	4.8	b	e
24.1	Cat. 135	cupped stone	stone	13.2	10.5	4.8	c	e
24.1	Cat. 244	worked antler tine	antler	5.2			c	na
24.2	112	bowl	stone	10.7	11	4.2	b	c
24.2	139	needle	bone	7.1	0.3	0.2	c	c
24.2	193	perforated disc	pottery	3.3	3.2	1.8	b	e
24.2	2001	point	bone	7.4	1	0.8	b	e
24.2	Cat. 108	hammerstone/grinder	stone	8.6	7.1	3.6	b	e
24.2	Cat. 109	cupped stone	stone	16.5	14	10	c	e
24.2	Cat. 110	polisher	stone	7.5	6.5		c	e
24.2	Cat. 138	bowl	stone	9.1	9.8	4.2	b	c
24.2	Cat. 139	misc. object	stone				b	na
24.2	Cat. 140	misc. object	stone				b	na
24.2	Cat. 144	hammerstone	stone				c	e
24.2	Cat. 145	hammerstone	stone				c	e
24.2	Cat. 146	hammerstone	stone	6.1	4.7	4	c	e
28.1	118	pendant?	stone	6.9	3.8	6.1	b	c
28.1	119	bead	antler	5.4	3.5	3.8	b	c
28.1	120	figurine	pottery	6.9	5.1	1.2	b	c
28.1	225.01	vessel	pottery	3.2			b	c
28.1	225.01	vessel	pottery	9.9	6.1	4.5	b	c
28.1	Cat. 118	hammerstone	stone				c	e
28.1	Cat. 119	hammerstone	stone	10	7.5	4	c	e
28.1	Cat. 120	misc. object	stone				b	na
28.1	Cat. 121	quern	stone	14.2		3.6	b	c
28.1	Cat. 123	hammerstone/grinder	stone				c	e

28.1	Cat. 124	misc. object	stone				b	na
28.1	Cat. 125	hammerstone	stone	8.5	8.5	8.5	c	e

PIT 100

CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	CONDITION	CURATION
100.0	564	anvil	stone	21.8	18.1	8	c	e
100.0	565	bowl	stone	12.1	8.8	3.2	b	c
100.0	412	figurine	pottery	6.7		2.1	b	c
100.0	566	hammerstone	stone	4.4	7	3.2	b	e
100.0	567	pestle	stone	12	9.2	6.9	c	c
100.1	569	cupped stone	stone	8	4.2	5.5	b	e
100.1	568	flaked tool	stone	6.1	5.1	2.2	b	e
100.1	570	pebble grinder	stone	8.3	5.9	2.2	c	e
100.1	Cat. 268	antler debitage	antler	3.9	2.9		c	na
100.1	Cat. 272	spatula	bone	4.3	2.1		b	e
100.2	1269	chisel	stone	2.8	1.2	0.8	b	c
100.2	572	misc. object	pottery	7.2		3.2	b	e
100.2	1913	point	bone	5.5	2.2	1.2	b	c
100.2	1914	point	bone	7.3	1.7	1.3	b	c
100.2	571	pounder	stone	14.2	9.6	6.2	c	e
100.2	442	vessel	pottery	12	12	4.2	b	c
100.2	443	vessel	pottery	18	18	9.4	b	c
100.2	389	worked pig tusk	bone	10	1.3	0.6	b	e
100.3	580	adze	stone	4.8	3.8	1.1	b	c
100.3	579	bowl	stone	14.2	8.9	3.5	b	c
100.3	585	bowl	stone	9.7	9.6	3.2	b	c
100.3	574	cupped stone	stone	16.7	8.5	4.3	b	e
100.3	304	figurine	pottery	4.8	3	2.7	b	c
100.3	584	figurine?	stone	11	8.8	5.9	b	c
100.3	581	jar stopper	stone	9.2	5.6	4.7	c	c
100.3	390	point	bone	12.3	1.6	1.5	c	c
100.3	576	pounder	stone	11.6	6	3.3	c	e
100.3	583	pounder	stone	5.6	5.1	3.9	c	e
100.3	573	quern	stone	18.8	20.2	5.9	b	c
100.3	578	rubber	stone	15.6	12.2	3.4	b	c
100.3	577	rubbing stone	stone	8.2	6.9	3.2	c	e
100.3	582	rubbing stone	stone			3.8	c	e
100.3	Cat. 269	worked antler tine	antler	7.8	1.4		c	na
100.4	298	jar stopper	stone	8	7.9	5.5	b	c
100.4	Cat. 270	worked antler tine	antler	4.6	1.3		c	na
100.4	Cat. 271	haft	antler	3.7	1.8		b	e

DITCH 105

CONTEXT	SITE FIND No.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	CONDITION	CURATION
105.1	627	anvil	stone	14.2	11	6.6	b	e
105.1	630	anvil	stone	20.1	19.4	8.5	b	e
105.1	598	axe	stone	7.8	4.4	3.8	b	c
105.1	599	axe	stone	4	3.5	2	b	c
105.1	602	axe	stone	7.9	4.8	2.6	b	c
105.1	605	axe	stone	5.8	6.5	4.7	b	c
105.1	612	axe	stone	3.7	6.2	3.4	b	c
105.1	615	axe	stone	6.8	7.4	3.4	b	c
105.1	618	axe	stone	9.4	4.6	3.5	b	c
105.1	622	axe	stone	6.5	6	2.6	b	c
105.1	624	axe	stone	6.8	5.3	3.6	b	c
105.1	604	axe-shaped grinder	stone	14.5	7.5	3.1	c	c
105.1	1936	bead	stone	1.1			b	c
105.1	632	bowl	stone	3.9	3.7	1.5	b	c
105.1	634	bowl	stone	8.9	6.8	2.7	b	c
105.1	641	bowl	stone	15.2	10	3.7	b	c
105.1	644	bowl	stone	12.2	10.7	2.9	b	c
105.1	647	bowl	stone	7.6	7.8	2.7	b	c
105.1	635	cupped stone	stone	10.4	10	5.7	b	e
105.1	645	cupped stone	stone	12.7	11	5.4	c	e
105.1	625	fine abrader	stone	6.4	3.6	1	b	c
105.1	603	flaked tool	stone	8.5	5.5	2.7	c	e
105.1	607	flaked tool	stone	12.9	6.1	2	c	e
105.1	610	flaked tool	stone	8.6	6	2.3	c	e
105.1	616	flaked tool	stone	10.8	7	3.2	b	e
105.1	617	flaked tool	stone	8.1	7.5	2.9	b	e
105.1	619	flaked tool	stone	7.3	5.1	1.4	b	e
105.1	620	flaked tool	stone	5.8	4.5	1.4	b	e
105.1	636	hammerstone	stone	13	8.8	3.6	c	e
105.1	643	hammerstone	stone	7.8	6.2	3.1	c	e
105.1	649	hammerstone	stone	12.5	8.1	5.2	c	e
105.1	640	hammerstone/grinder	stone	13.2	11.6	4.3	c	e
105.1	648	lid	stone	10.4	8.9	3	b	e
105.1	357	misc. object	pottery	6.5	4.3	1.8	b	e
105.1	608	misc. object	stone	4.5	2.7	1.7	b	e
105.1	614	misc. object	stone	6.1	6.5	3.5	b	e
105.1	623	misc. object	stone	8	6.9	3.8	b	e
105.1	659	misc. object	stone	1.3	1.1	1	b	e
105.1	606	pebble grinder	stone	7.4	3.6	1.7	b	e
105.1	613	pebble grinder	stone	10.8	5.3	2.3	c	e
105.1	621	pebble grinder	stone	4	5	2.3	b	e
105.1	305	pendant	stone	5.3	1.3	0.6	c	c
105.1	660	pestle	stone	15.7	7.2	6.1	b	c
105.1	601	polisher	stone	5	6.1	1.5	b	e
105.1	609	pounder	stone	8.4	8.1	4.1	b	e
105.1	611	pounder	stone	9.9	4.3	1.6	c	e
105.1	633	pounder	stone	10.7	8.6	5.1	c	e

Context	Site Find No.	Class	Material	Length	Width	Thickness	Condition	Curation
105.1	638	pounder	stone	11.5	8.3	6.3	c	e
105.1	642	pounder	stone	7.5	6.7	6.7	c	e
105.1	626	quern	stone	17.1	11.9	7.5	b	c
105.1	628	rubber	stone	16.6	13.6	7.6	b	c
105.1	629	rubber	stone	14.9	16.6	7.5	b	c
105.1	637	rubber	stone	9.5	11.2	3.4	b	c
105.1	646	rubber	stone	9.9	7.6	3	b	c
105.1	631	rubbing stone	stone	14.4	8.5	3.8	c	e
105.2	655	adze	stone	7.1	4.5	1.8	b	c
105.2	651	axe	stone	5.5	5.8	2.7	b	c
105.2	656	axe	stone	8.5	4.4	2.4	c	c
105.2	658	axe-shaped grinder	stone	6.6	6.4	3.3	b	c
105.2	653	hammerstone	stone	7.6	6.1	2.4	c	e
105.2	652	misc. object	stone	7.5	4.2	2.7	b	e
105.2	657	pestle	stone	10.9			b	c
105.2	654	pounder	stone	8.4	5.5	2.5	c	e
105.3	1911	point	bone	3.5	0.5	0.3	b	c

Ditch 106

Context	Site Find No.	Class	Material	Length	Width	Thickness	Condition	Curation
106.1	299	fine abrader	stone	10.7	4.3	1.1	b	c
106.1	453	mortar	stone	58	42	17.5	c	c
106.1	662	pounder	stone	5.1	2.1	1.4	c	e
106.1	663	polisher	stone	5.2	4.9	1.1	c	e
106.1	664	axe	stone	5.5	4.1	2.7	b	c
106.1	665	adze	stone	5.4	4.7	1.2	b	c
106.1	666	bowl	stone	12.1	5.4	3.1	b	c
106.1	667	axe	stone	7.5	4.1	1.7	c	c
106.1	668	hammerstone	stone	9.7	9.1	4	c	e
106.1	669	hammerstone	stone	10.7	9.9	3.7	c	e
106.1	670	rubbing stone	stone	11.4	9	4.2	c	e
106.1	671	quern	stone	30.1	16.3	8.7	b	c

Ditch 107

Context	Site Find No.	Class	Material	Length	Width	Thickness	Condition	Curation
107.1	674	axe	stone	5.3	4.8	1.7	b	c

Context	Site Find No.	Class	Material	Length	Width	Thickness	Condition	Curation
107.1	690	axe	stone	4.1	4.5	2.3	b	c
107.1	694	axe	stone	9.3	5.3	2.4	b	c
107.1	673	axe-shaped grinder	stone	10	7.2	3.4	b	c
107.1	695	axe-shaped grinder	stone	8.8	6.6	2.3	b	c
107.1	697	axe-shaped grinder	stone	7.2	7	3.3	b	c
107.1	306	bowl	stone	34.3	14.2	14	c	c
107.1	676	bowl	stone	8.2	6.7	1.2	b	c
107.1	682	bowl	stone	13.2	7.5	2.1	b	c
107.1	689	bowl	stone	7	5.6	1.8	b	c
107.1	693	bowl	stone	5.6	3.5	1.8	b	c
107.1	679	cupped stone	stone	11.3	9.7	6.2	c	e
107.1	681	cupped stone	stone	8.5	6.9	5.6	c	e
107.1	684	flaked tool	stone	11.2	6.9	1.8	c	e
107.1	675	hammerstone	stone	7.6	5.9	3.4	b	e
107.1	677	hammerstone/grinder	stone	12.5	10.8	3.6	c	e
107.1	687	lid	stone	10.2	8.9	2.9	c	e
107.1	678	misc. object	stone	4.7	5.5	2.3	b	na
107.1	686	misc. object	stone	5	3.1	1.1	b	na
107.1	688	pebble grinder	stone	9.3	4.5	3.1	b	e
107.1	692	pebble grinder	stone	5	5.5	2.4	b	e
107.1	698	pebble grinder	stone	7.3	4	2.1	b	e
107.1	749	pebble grinder	stone	6.5	6	2	b	e
107.1	685	perforated sherd	pottery	7.5	4.5	1.4	b	c
107.1	683	perforated stone	stone	9.7	8	4	c	c
107.1	680	perforated disc	pottery	5.3	3.5	1.2	b	c
107.1	696	pounder	stone	9.3	6.7	2.4	b	e
107.1	699	pounder	stone	11	7.4	3.7	b	e
107.1	672	quern	stone	30.9	13.2	6	b	c
107.1	1938	quern	stone	33	25.5	4.7	b	c
107.1	1939	quern	stone	33	31	5	b	c
107.2	709	axe	stone	5.3	3.6	2.3	c	c
107.2	710	bowl	stone	8.5	6	1.2	b	c
107.2	711	bowl	stone	7.4	4.8	1.3	b	c
107.1/	706	axe	stone	6.1	5.5	1.8	b	c
107.1/	707	axe	stone	4.6	4.5	1.6	b	c
107.1/	1165	axe	stone	3.7	5.5	1.6	b	c
107.1/	700	bowl	stone	5.3	2.5	1.1	b	c
107.1/	703	cupped stone	stone	13.6	11.4	5.6	c	e
107.1/	301	figurine	stone	13.4	8.2	6.1	c	c
107.1/	701	hammerstone	stone	12.8	7.3	4.7	b	e
107.1/	704	hammerstone	stone	6.5	4.2	3	c	e
107.1/	702	hammerstone/grinder	stone	13.9	11.7	4.1	c	e
107.1/	705	hammerstone/grinder	stone	9.8	5.5	4.8	b	e
107.1/	411	lid	pottery	9		2.9	b	c
107.1/	1940	quern	stone	28	28.7	3.9	b	c
107.1/	1941	quern	stone	27	23.3	9.7	b	c
107.1/	1166	rubbing stone	stone	7.3	5.9	2.6	b	e
107.6	1167	hammerstone	stone	11.1	9.8	6.7	c	e

PIT 108

CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	CONDITION	CURATION
108.1	752	perforated disc	pottery			1.1	b	c
108.1	754	perforated disc	pottery	5	4.5	0.9	c	c
108.1	755	perforated disc	pottery			1.1	c	c
108.1	756	perforated disc	pottery	4.2	3	1.1	b	c
108.1	758	misc. object	pottery	5.4	2.8	1.5	b	e
108.1	712	axe	stone	8.4	5.1	3.7	b	c
108.1	713	pebble grinder	stone	5.5	4.9	2.7	b	e
108.1	714	flaked tool	stone	7.3	3.5	1.5	b	e
108.1	715	axe	stone	5.6	7	2.8	b	c
108.1	716	misc. object	stone	7.6	7	4.8	b	e
108.1	717	misc. object	stone	4.4	4.9	1.5	b	e
108.1	718	pounder	stone	8.8	4.1	1.8	c	e
108.1	719	axe-shaped grinder	stone	5.9	6.3	3.4	b	c
108.1	720	axe	stone	7	4	1.8	c	c
108.1	721	hammerstone	stone	8	7.7	4.2	b	e
108.1	722	axe	stone	7.4	5.7	4.3	b	c
108.1	723	pestle	stone	7.5	8.8	6.9	b	c
108.1	724	pebble grinder	stone	7	3	1.5	b	e
108.1	725	axe	stone	5	3.3	1.5	b	c
108.1	728	misc. object	stone	4.2	4.6	3.1	b	e
108.1	729	misc. object	stone	9.2	7	4.5	b	e
108.1	730	axe	stone	7.2	8.6	4	b	c
108.1	731	flaked tool	stone	7.8	5.4	2.1	b	e
108.1	732	pounder	stone	8.3	7.9	7.3	b	e
108.1	733	misc. object	stone	5.1	8.2	4.4	b	e
108.1	734	pounder	stone	13.3	6.6	5.2	c	e
108.1	735	pounder	stone	13.8	6.8	5	c	e
108.1	736	axe	stone	7	6.7	3.3	b	c
108.1	738	misc. object	stone	4.7	5.1	5	b	e
108.1	739	misc. object	stone	6.7	7.5	2	b	e
108.1	740	flaked tool	stone	6.7	7.1	2	b	e
108.1	741	axe-shaped grinder	stone	4	5.9	3.6	b	c
108.1	742	axe	stone	5.2	4.1	2.7	b	c
108.1	745	flaked tool	stone	6.8	4.8	1.1	c	e
108.1	746	axe-shaped grinder	stone	6.3	6.2	3.8	b	c
108.1	747	axe	stone	6.3	4.6	1.2	c	c
108.1	751	bowl	stone	8.2	7.3	1.4	b	c
108.1	757	jar stopper	stone	7.8	4.5	3.7	b	c
108.1	759	rubber	stone	11.8	9.6	4.3	b	c
108.1	760	pounder	stone	9.1	6.2	2	c	e
108.1	761	cupped stone	stone	8.1	8.7	3.8	b	e
108.1	762	hammerstone	stone	9.5	6.4	2	c	e
108.1	763	bowl	stone	15.6	13.6	3.9	b	c
108.1	764	bowl	stone	11.9	11.7	3.9	b	c
108.1	765	hammerstone/grinder	stone	10.8	10	3.8	c	e
108.1	766	cupped stone	stone	4.4	3.6	1	b	e
108.1	767	bowl	stone	7.5	5.5	2	b	c

Context	Site Find No.	Class	Material	Length	Width	Thickness	Condition	Curation
108.1	769	bowl	stone	11.1	8.7	2.9	b	c
108.1	770	bowl	stone	4.8	4	1.3	b	c
108.1	771	bowl	stone	12.1	10.3	3	b	c
108.1	772	conical stone	stone	13.9	9.9	9.5	b	c
108.1	773	anvil	stone	15.6	11.8	7	b	e
108.1	774	conical stone	stone			7.7	b	c
108.1	1174	bowl	stone	4.5	3.4	1	b	c
108.1	Cat. 265	worked antler tine	antler	5.4	2		c	e
108.2	1909	bead	antler	3.7			b	c
108.2	1910	needle	bone	3.3	0.2	0.2	b	e
108.2	445	vessel	pottery	42	32	13.2	b	c
108.2	795	figurine?	pottery	3.9	2.1	1.9	b	c
108.2	300	grooved stone	stone	14.7	10.9	7.9	c	e
108.2	776	flaked tool	stone	10.6	7.7	2.1	c	e
108.2	777	pounder	stone	3.7	5.5	4.7	b	e
108.2	778	axe	stone	6	6.1	4.2	b	c
108.2	779	misc. object	stone	4.9	6	3.3	b	e
108.2	780	misc. object	stone	7.1	5.2	2.2	b	e
108.2	781	misc. object	stone	10	3.1	3.9	b	e
108.2	782	misc. object	stone	8.1	5.5	3.7	b	e
108.2	783	axe-shaped grinder	stone	4.8	5.8	3.9	b	c
108.2	784	misc	stone	5.2	5.5	3	b	e
108.2	786	flaked tool	stone	5.3	3.3	1.6	b	e
108.2	787	polisher	stone	7.5	5.2	1.2	b	e
108.2	788	hammerstone	stone	8.5	7.1	2.5	b	e
108.2	789	flaked tool	stone	6.3	4.3	1	c	e
108.2	790	flaked tool	stone	5.9	4.5	1.7	b	e
108.2	791	hammerstone/grinder	stone	9.7	7.6	3.8	c	e
108.2	792	adze	stone	5.6	4.1	1.2	c	c
108.2	793	hammerstone/grinder	stone	10.9	8.5	3.8	c	e
108.2	796	hammerstone	stone	10.5	9.5	7.2	c	e
108.2	797	misc	stone	11.7	10.7	1.8	b	e
108.2	798	bowl	stone	13.4	7.9	5	b	c
108.2	799	hammerstone	stone	6.6	5.9	5.4	c	e
108.2	800	pounder	stone	7.1	6.4	5.3	c	e
108.2	801	pestle	stone	10.6	6.6	5.8	c	c
108.2	802	flaked tool	stone	6.7	7.5	3.2	b	e
108.2	803	hammerstone	stone	3.1	5.9	3.6	b	e
108.2	804	hammerstone	stone	8.8	6.7	5.8	c	e
108.2	805	bowl	stone	10.4	9.2	4.2	b	c
108.2	806	hammerstone	stone	10.4	7.6	5.3	b	e
108.2	807	hammerstone	stone	7.1	6.3	4	c	e
108.2	808	hammerstone	stone	7.4	4.9	2.8	b	e
108.2	809	hammerstone	stone	12.6	10.4	3.3	c	e
108.2	810	pounder	stone	8.1	6.5	3	c	e
108.2	811	fine abrader	stone	5.8	4.6	1.3	b	c
108.2	812	bowl	stone	6.1	3.4	2.4	b	c
108.2	813	rubber	stone	16.2	11	5.3	b	c
108.3	785	perforated disc	pottery	3.5	2.4	0.9	b	c
108.3	794	bowl	stone	10.6	8.6	2.6	b	c

PIT 109

CONTEXT	SITE FIND NO.	CLASS	MATERIAL	LENGTH	WIDTH	THICKNESS	CONDITION	CURATION
109.0	822	adze	stone	16.9	8.2	3.2	b	c
109.0	815	axe	stone	6.2	7.1	2	b	c
109.0	816	axe	stone	7.7	7.5	3.2	b	c
109.0	819	axe-shaped grinder	stone	10	5.3	4.5	c	c
109.0	821	bowl	stone	11	8.3	5.2	b	c
109.0	824	bowl	stone				b	c
109.0	814	chisel	stone	3.6	1.2	1.2	c	c
109.0	823	chisel	stone	6	3.5	1.1	b	c
109.0	831	conical stone	stone	11.7	11.4	5.5	b	c
109.0	818	cupped stone	stone	7.9	6.2	4.7	c	e
109.0	829	cupped stone	stone	13.7	10.4	8.4	c	e
109.0	830	cupped stone	stone	9.9	9.4	6.4	b	e
109.0	825	hammerstone	stone	7.2	4.5	3.6	b	e
109.0	826	hammerstone	stone	8.7	7.7	4.2	c	e
109.0	827	hammerstone/grinder	stone	10.9	9.5	4.4	c	e
109.0	820	pebble grinder	stone	14.2	8.7	3.2	b	e
109.0	828	pounder	stone	10.4	4.4	3.7	b	e
109.0	Cat. 264	antler debitage	antler	3.7	1.9		c	e
109.1	845	anvil	stone	14.4	12.9	4.2	b	e
109.1	832	bowl	stone	9.2	5.5	2.1	b	c
109.1	835	bowl	stone	6.8	4.4	1.8	b	c
109.1	836	bowl	stone	8.7	3.3	3	b	c
109.1	842	bowl	stone	14.4	13	2.6	b	c
109.1	843	bowl	stone	15.9	10	1.8	b	c
109.1	848	bowl	stone	14.2	7.9	3.1	b	c
109.1	844	cupped stone	stone	12.7	9.2	4.7	b	e
109.1	834	hammerstone	stone	8.3	6.5	4.2	b	e
109.1	846	hammerstone	stone	14.7	9.5	4.9	c	e
109.1	833	hammerstone/grinder	stone	8.8	5.7	5.6	c	e
109.1	839	hammerstone/grinder	stone	8.4	8	4	c	e
109.1	840	hammerstone/grinder	stone	6.6	7.5	3.3	b	e
109.1	841	hammerstone/grinder	stone	9.3	4.9	3.8	b	e
109.1	847	hammerstone/grinder	stone	14.7	12.1	3.7	c	e
109.1	838	pebble grinder	stone	9.6	6.3	2.4	c	e
109.1	837	pounder	stone	7.5	4.4	3.4	b	e
109.2	850	bowl	stone	7.7	12.4	2.7	b	c
109.2	853	bowl	stone	9	7.3	1	b	c
109.2	860	bowl	stone	11.2	10	3.8	b	c
109.2	851	cupped stone	stone	10.4	9.1	5.4	c	e
109.2	856	cupped stone	stone	9.4	8.7	8.1	b	e
109.2	861	cupped stone	stone	10.7	13.9	4.8	b	e
109.2	302	figurine	stone	7.5	3.6	2.2	b	c
109.2	857	hammerstone	stone	11.7	6.6	2.8	c	e
109.2	859	hammerstone	stone	7.3	6.3	2.2	c	e
109.2	858	hammerstone/grinder	stone	10.7	9.8	4.4	c	e
109.2	852	pebble grinder	stone	9.3	6	2	b	e

Context	Site Find No.	Class	Material	Length	Width	Thickness	Condition	Curation
109.2	854	perforated disc	pottery	5.4	3.4	1.2	b	c
109.2	855	rubber	stone	13.2	6.5	5	b	c
109.3	932	anvil	stone	20.8	11.3	7.3	c	e
109.3	920	axe-shaped grinder	stone	5.5	6	3.8	b	c
109.3	303	bowl	stone	8.1	7.3	1.1	b	c
109.3	906	bowl	stone	8.1	7.6	2.7	b	c
109.3	907	bowl	stone	7.7	4.5	1	b	c
109.3	908	bowl	stone	5.5	4.2	0.9	b	c
109.3	911	bowl	stone	10.3	10	4.1	b	c
109.3	917	bowl	stone	10.2	6.8	4	b	c
109.3	922	bowl	stone	9.8	10	3.2	b	c
109.3	924	bowl	stone	8.9	7.9	3.3	b	c
109.3	912	cupped stone	stone	10.7	8.8	4.5	b	e
109.3	914	cupped stone	stone	13.3	11.9	6.1	c	e
109.3	307	figurine	pottery	11.3	3.9	2.2	b	c
109.3	1271	figurine?	pottery	4.2	4	1.8	b	c
109.3	915	hammerstone	stone	9	6.1	2.5	b	e
109.3	926	hammerstone	stone	9.9	7.8	5.1	c	e
109.3	928	hammerstone	stone	10.2	9.2	4.3	b	e
109.3	929	hammerstone	stone	11.8	10	5.4	c	e
109.3	930	hammerstone	stone	9.1	7.4	6.9	c	e
109.3	931	hammerstone	stone	12.2	10	5.3	c	e
109.3	1163	hammerstone	stone	12.3	7.7	7.2	c	e
109.3	1164	hammerstone	stone	8	7.7	4.1	c	e
109.3	923	hammerstone/grinder	stone	9.9	9.2	3.9	c	e
109.3	925	jar stopper	stone	3.3			b	c
109.3	918	misc. object	stone	10.1	8.9	2.1	b	e
109.3	916	pebble grinder	stone	10	7.2	3.5	b	e
109.3	910	perforated disc	pottery	4.2	4.1	1	c	c
109.3	913	pounder	stone	13	5.7	5.1	c	e
109.3	919	pounder	stone	9.5	5.7	4.8	b	e
109.3	921	pounder	stone	10.3			b	e
109.3	927	pounder	stone	13.8	9.2	3.4	c	e
109.3	933	pounder	stone	19.8	8.2	7.4	c	e
109.4	869	adze	stone	4.4	4.8	0.7	b	c
109.4	868	axe-shaped grinder	stone	10.1	4.2	2.6	b	c
109.4	863	bowl	stone	21.4	18.3	6.8	b	c
109.4	864	bowl	stone	14.4	8.4	3.9	b	c
109.4	865	bowl	stone	8.9	8.3	2.6	b	c
109.4	866	bowl	stone	10.6	6	2.1	b	c
109.4	872	bowl	stone	17.1	7.7	3.2	b	c
109.4	878	bowl	stone	5.5	3.3	1.1	b	c
109.4	879	bowl	stone	8.3	6.7	3.2	b	c
109.4	880	bowl	stone	8.8	8.5	1.9	b	c
109.4	862	figurine?	pottery	7.1	4.5	3.3	b	c
109.4	867	flaked tool	stone	9.2	9.2	2.4	b	e
109.4	875	hammerstone	stone	9.2	8.1	5	c	e
109.4	876	hammerstone	stone	9.6	5.8	5.8	b	e
109.4	877	hammerstone	stone	10.9	9	4.1	b	e
109.4	881	pebble grinder	stone	3	3.9	1.5	b	e

Context	Site Find No.	Class	Material	Length	Width	Thickness	Condition	Curation
109.4	871	pestle	stone	11.1	8.7	0.7	b	c
109.4	874	pounder	stone	8.1	6.2	5.9	c	e
109.4	873	rubber	stone	12.9	14	1.8	b	c
109.4/	882	anvil	stone	18.9	16.1	5	b	e
109.6	884	bowl	stone	9.2	5.5	2	b	c
109.6	885	bowl	stone	13	8	4.1	b	c
109.6	891	figurine	stone	7.9	4.1	2.6	c	c
109.6	890	hammerstone	stone	7.5	7	3.3	c	e
109.6	889	misc. object	stone	4.8	5	3.9	b	e
109.6	886	perforated stone	stone	14.2	6.3	8	b	e
109.6	887	perforated stone	stone	8.5	11	4.1	b	e
109.6	888	pounder	stone	8.2	5.3	4.6	b	e
109.6	883	rubber	stone	12	7.5	2.8	b	c
109.7	895	anvil	stone	20.7	9.8	7	c	e
109.7	894	hammerstone	stone	18.6	11.1	6.4	c	e
109.7	892	perforated disc	pottery			1.1	c	c
109.7	896	perforated disc	pottery	5.2	4.2	0.9	b	c
109.7	893	perforated stone	stone	12.3	8.9	3.7	c	e
109.8	899	axe	stone	5.9	4	2.5	b	c
109.8	904	bowl	stone	18.3	8.6	4.9	b	c
109.8	898	cupped stone	stone	10.2	11	4.6	b	e
109.8	900	cupped stone	stone	9.9	8.1	4.3	b	e
109.8	905	flaked tool	stone	6.9	4.6	1.4	c	e
109.8	897	hammerstone	stone	10.3	6.5	2	c	e
109.8	901	pebble grinder	stone	7.3	3.2	1.9	b	e
109.8	903	pounder	stone	8.4	6.7	4.3	b	e
109.8	902	rubbing stone	stone	7.7	8.5	2.7	b	e

FIGURES

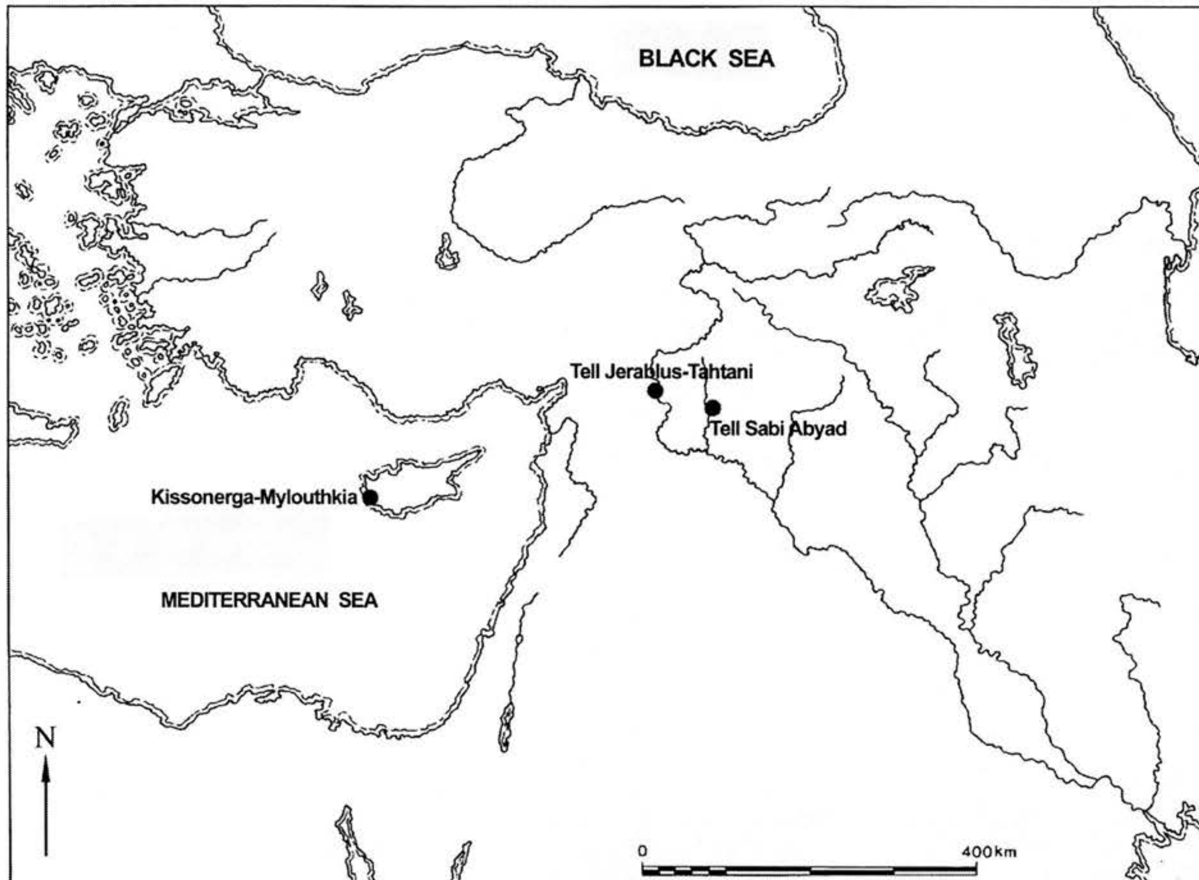

Figure 1. Map showing the location of the three case study sites.

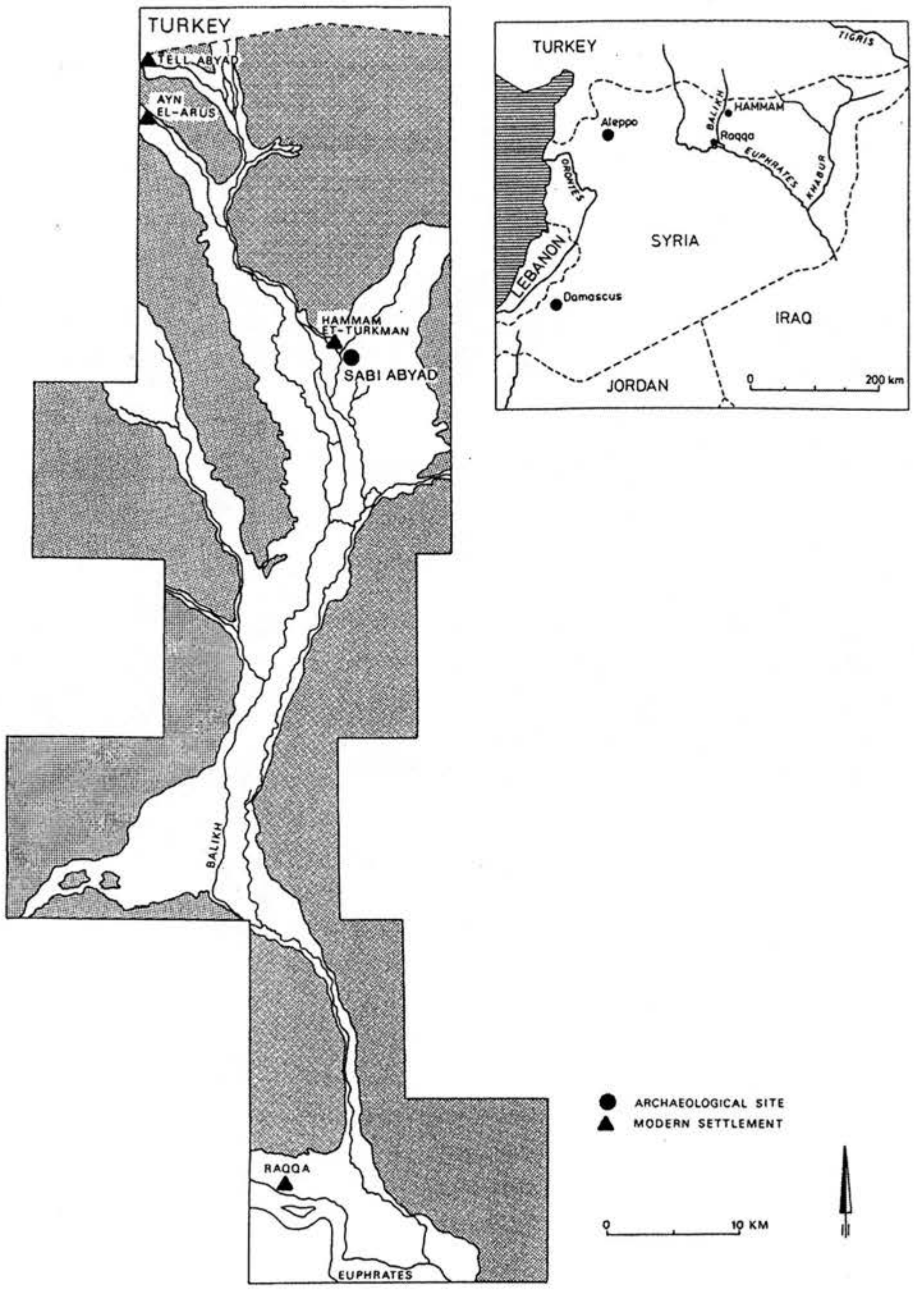

Figure 2. Map of the Balikh valley showing the location of Tell Sabi Abyad.
(Verhoeven 1999: Figure 1.1, 2)

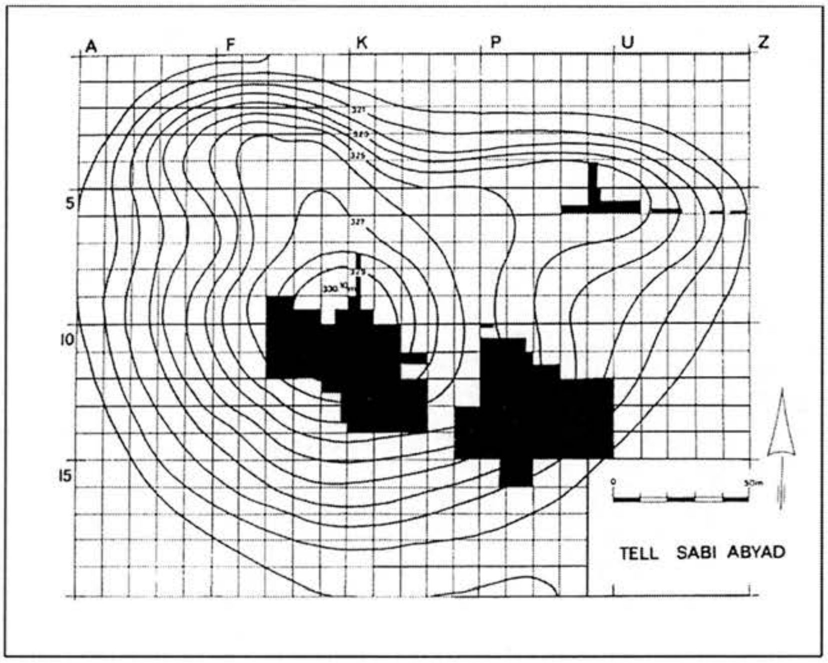

Figure 3. Plan of Tell Sabi Abyad showing excavation trenches. (after Akkermans 1996: figure 2.1)

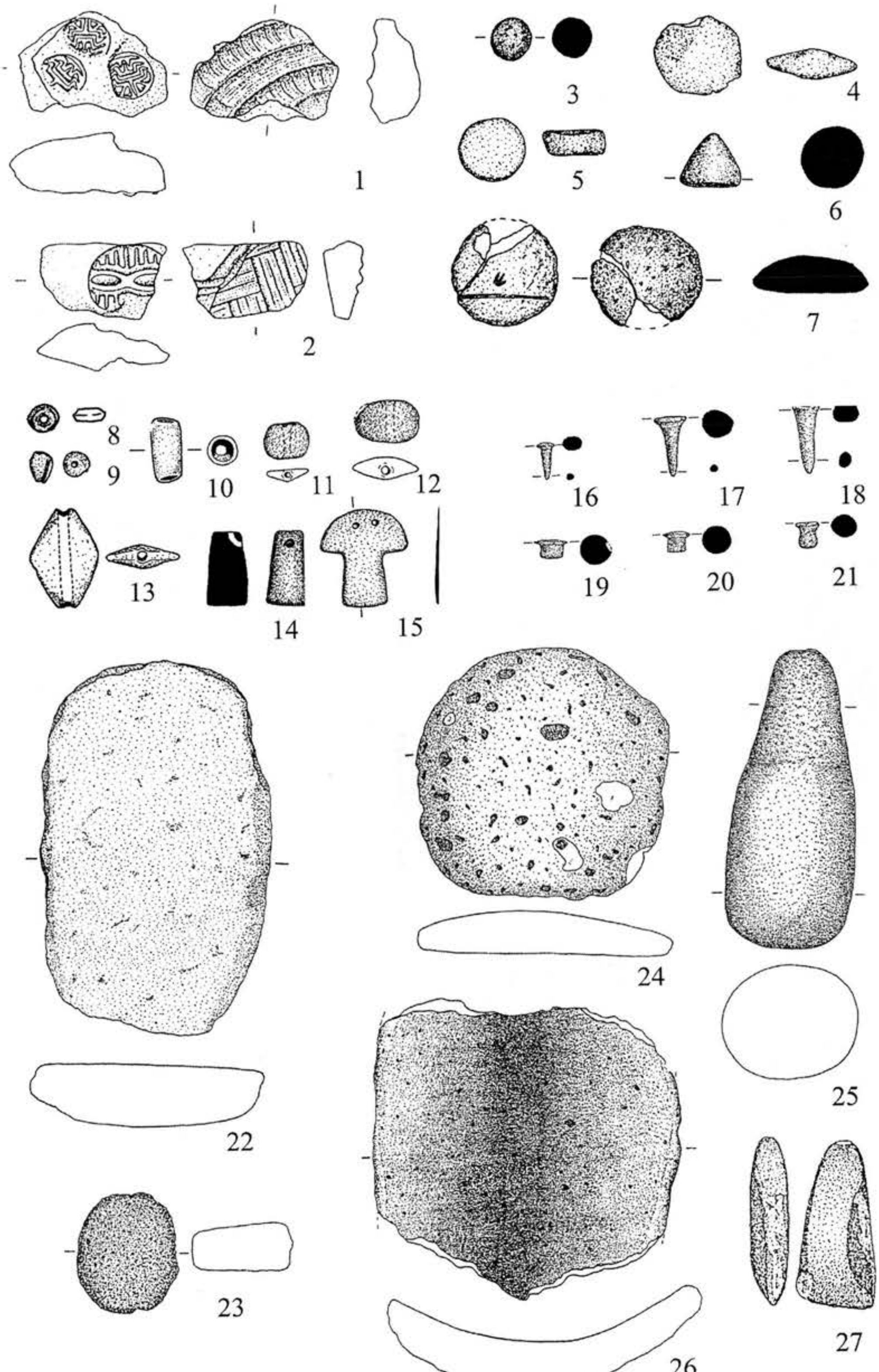

Figure 4. Artefacts associated with the categories of storage/administration (1-7), personal ornament (8-21), heavy processing (22-26) and cutting tools (27) from Tell Sabi Abyad, Level 6. Scale 1:2 (1-7, 27); 1:4 (22-26); 1:5 (8-21).

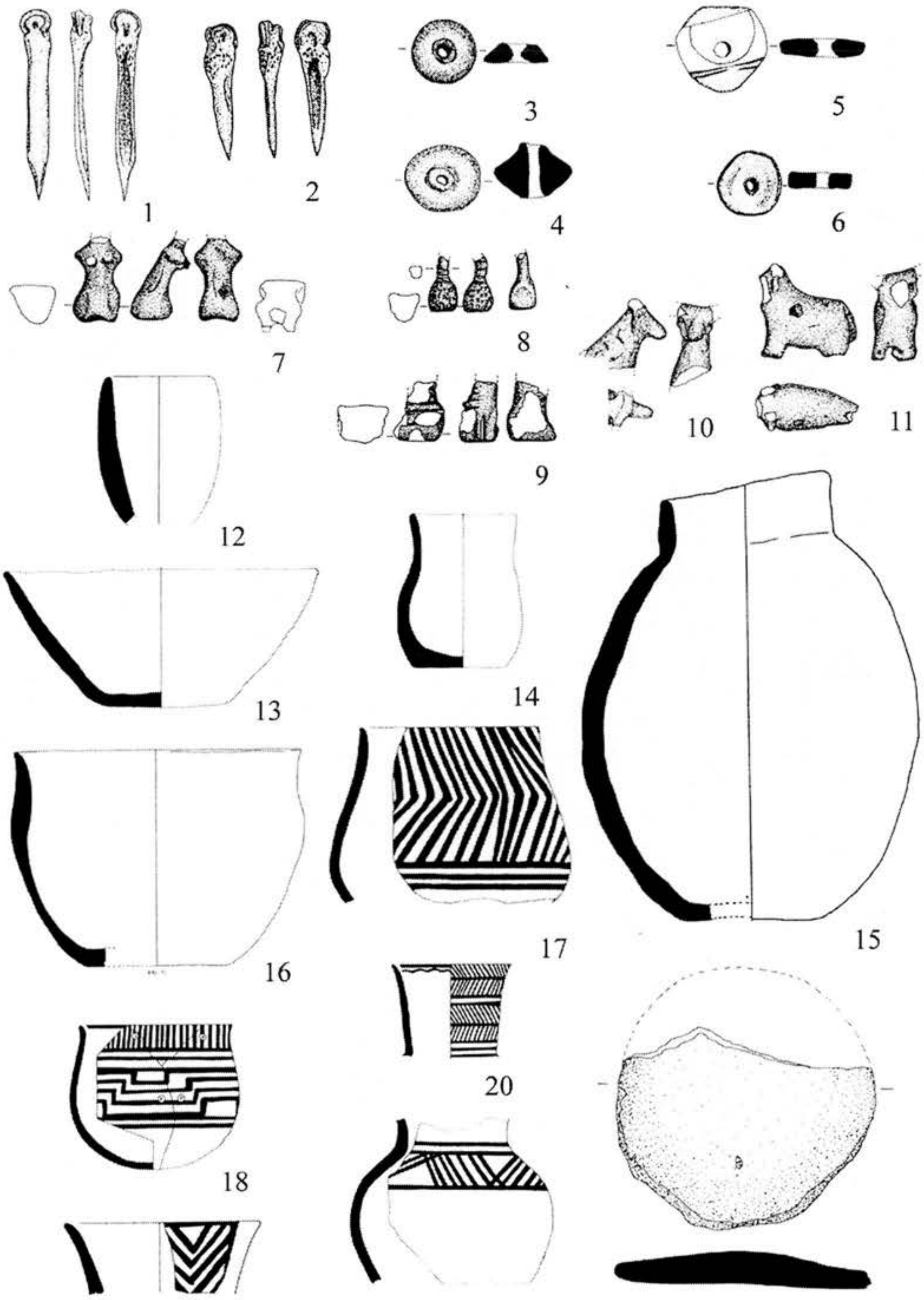

Figure 5. Artefacts associated with the categories of textile production (1-6), ideology/ritual (7-11) and containing (12-22) from Tell Sabi Abyad, various levels. Scale 1:3 (1-11, 22); 1:6 (12-21)

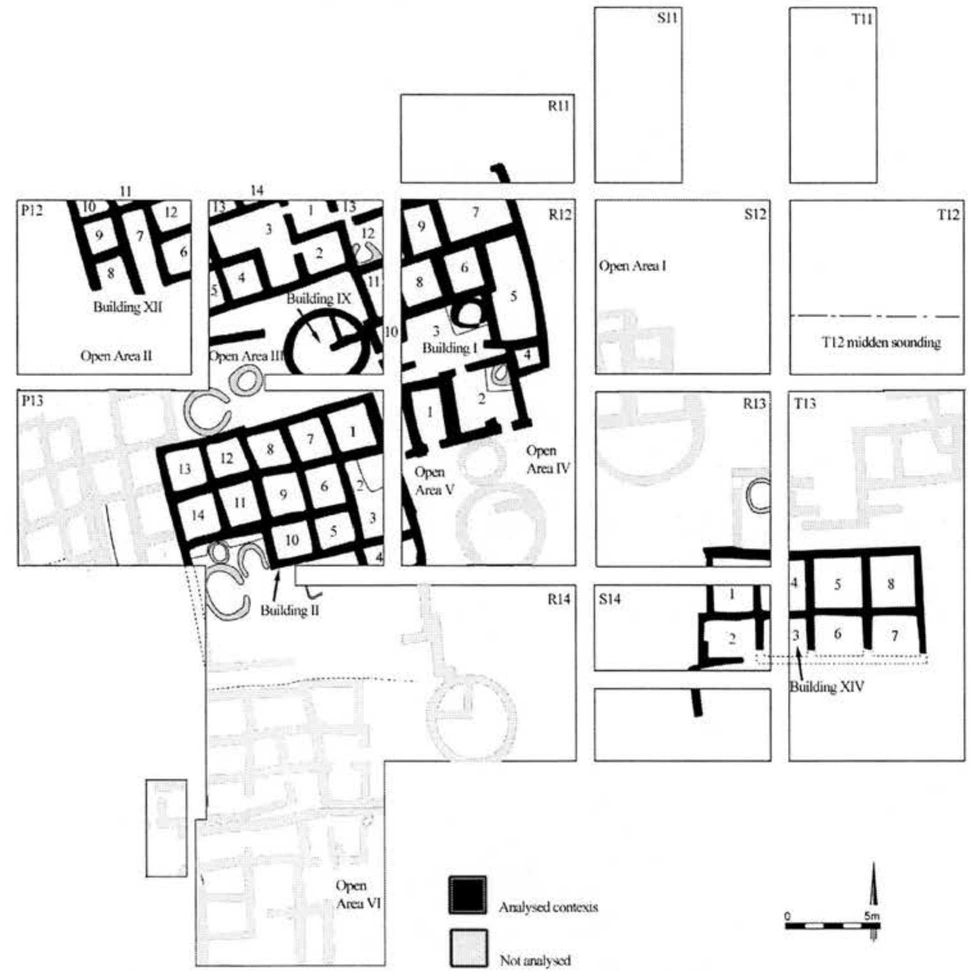

Figure 6. Plan of Tell Sabi Abyad,Burnt Village Level 6 (after a drawing by P. Collet)

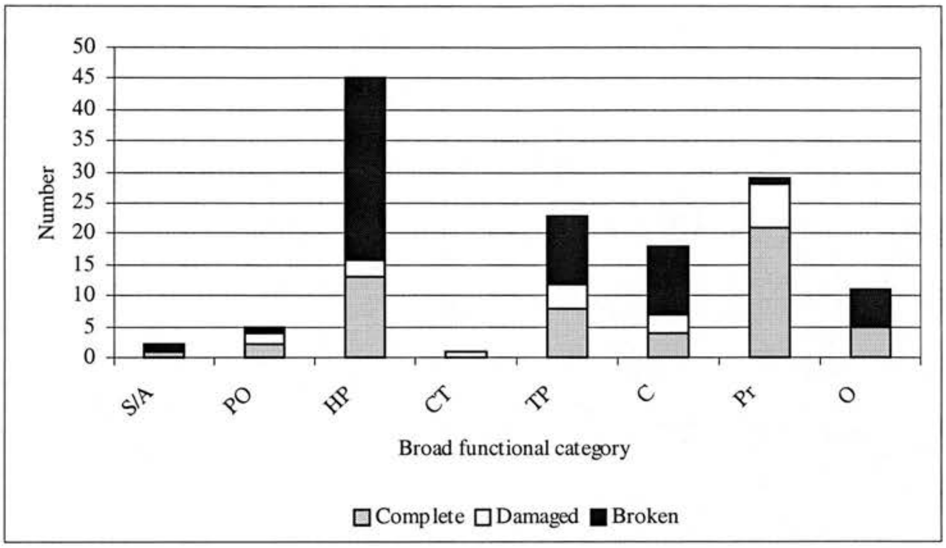

Figure 7. Occurrence of artefacts from Tell Sabi Abyad, Building 6.I, by broad functional category and condition

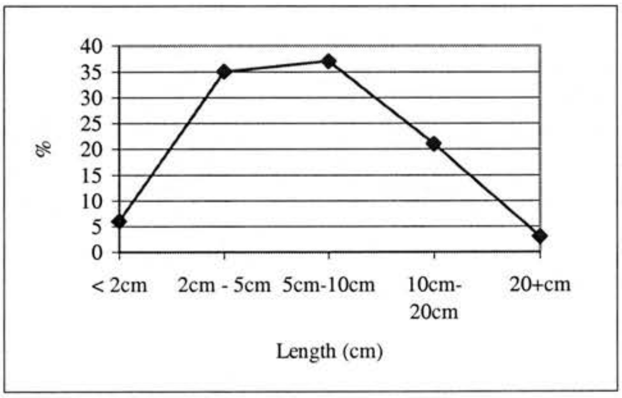

Figure 8. Occurrence of artefacts from Sabi Abyad, Building 6.I, by longest dimension.

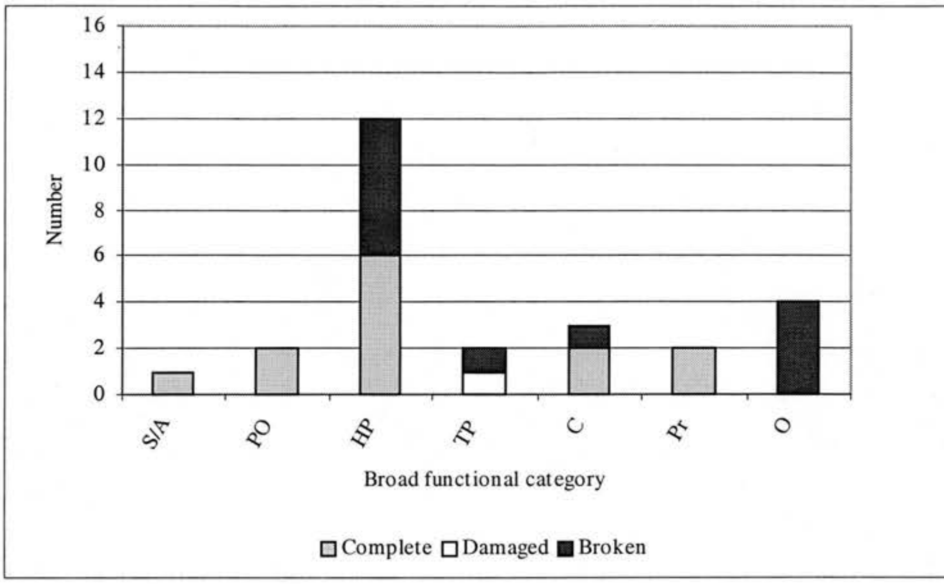

Figure 9. Occurrence of artefacts from Tell Sabi Abyad, Building 6.I, Room 3, by broad functional category and condition.

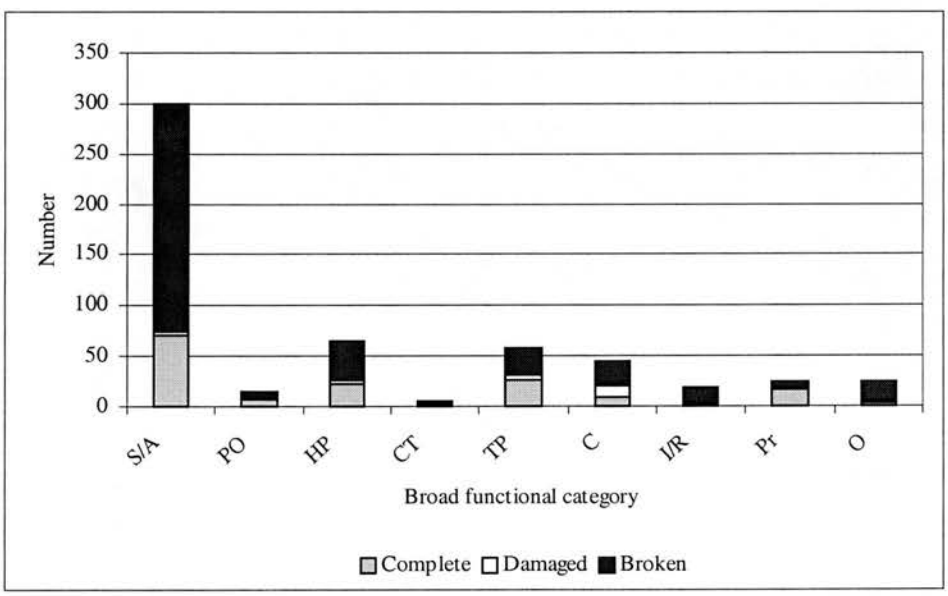

Figure 10. Occurrence of artefacts from Tell Sabi Abyad, Building 6.II, by broad functional category and condition

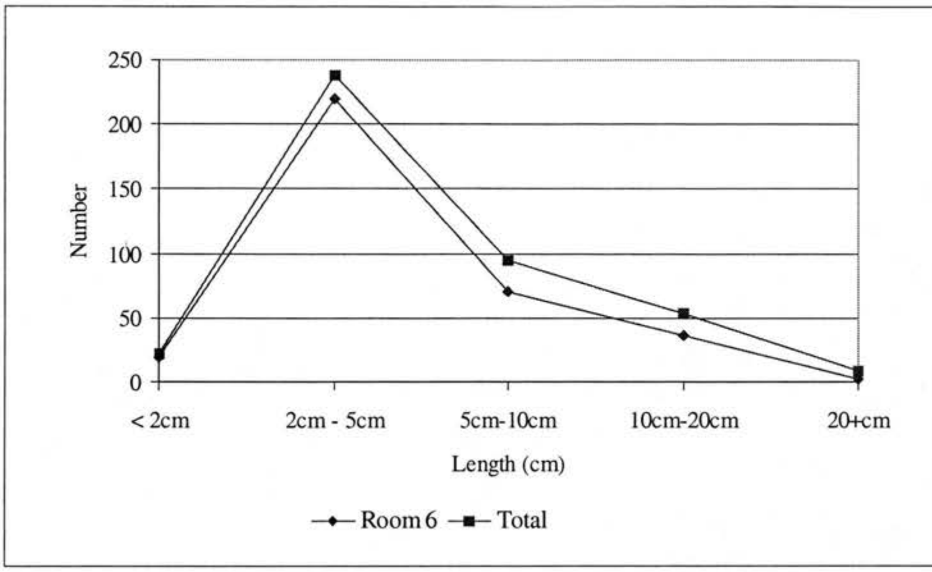

Figure 11. Occurrence of artefacts from Tell Sabi Abyad, Building 6.II, by longest dimension.

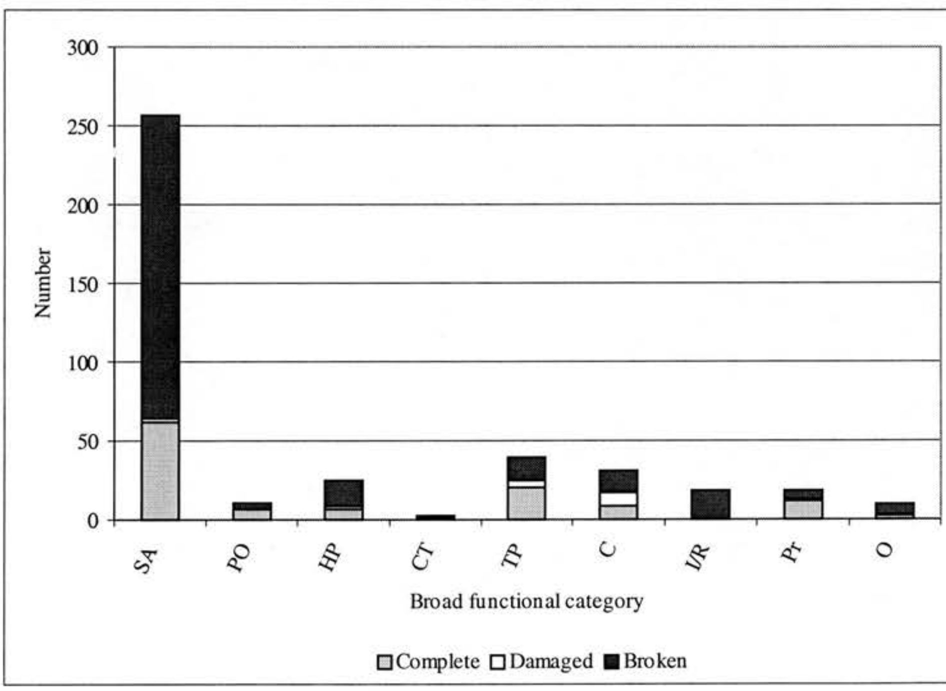

Figure 12. Occurrence of artefacts from Tell Sabi Abyad, Building 6.II, Room 6, by broad functional category and condition.

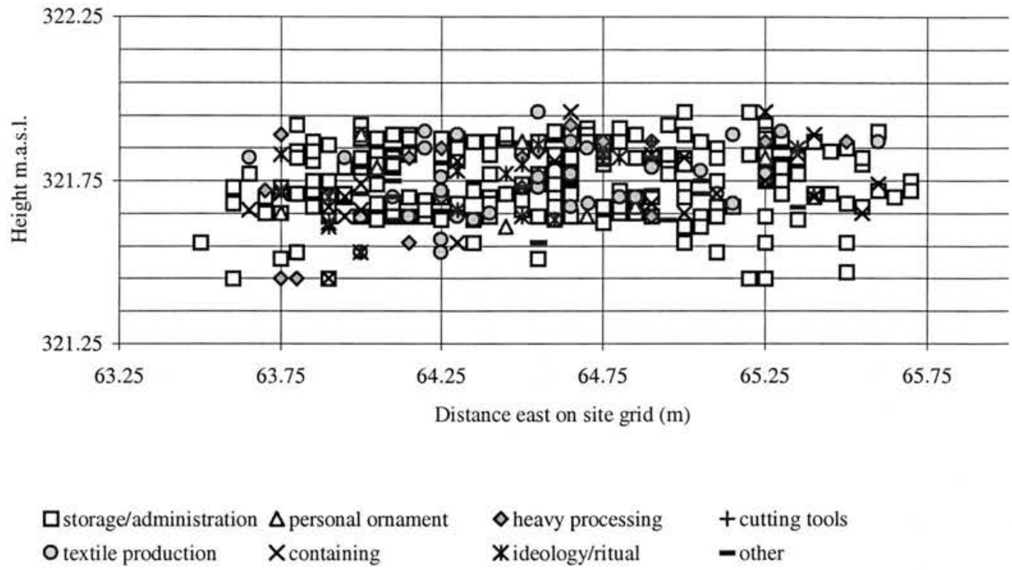

Figure 13. Vertical distribution of artefacts from Tell Sabi Abyad, Building 6.II, Room 6, by broad functional category.

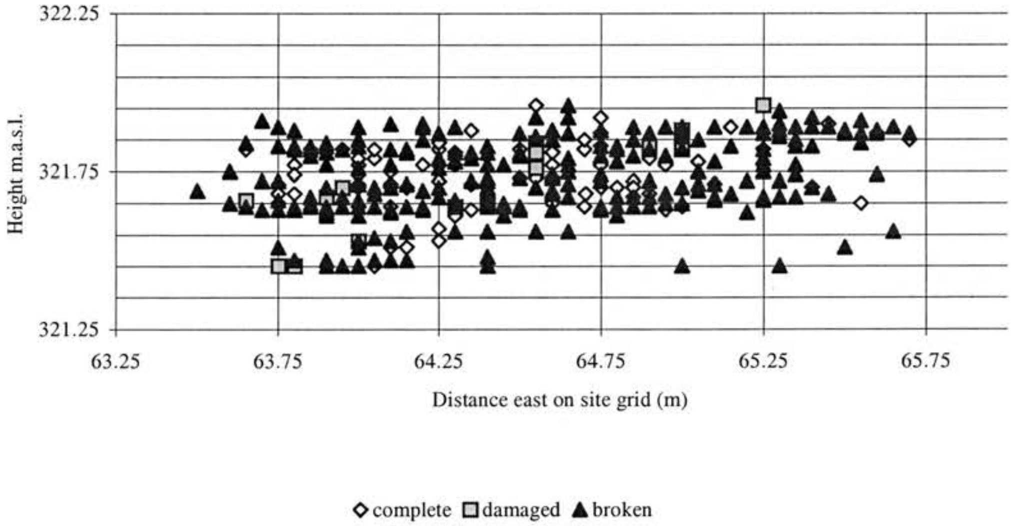

Figure 14. Vertical distribution of artefacts from Tell Sabi Abyad, Building 6.II, Room 6, by condition.

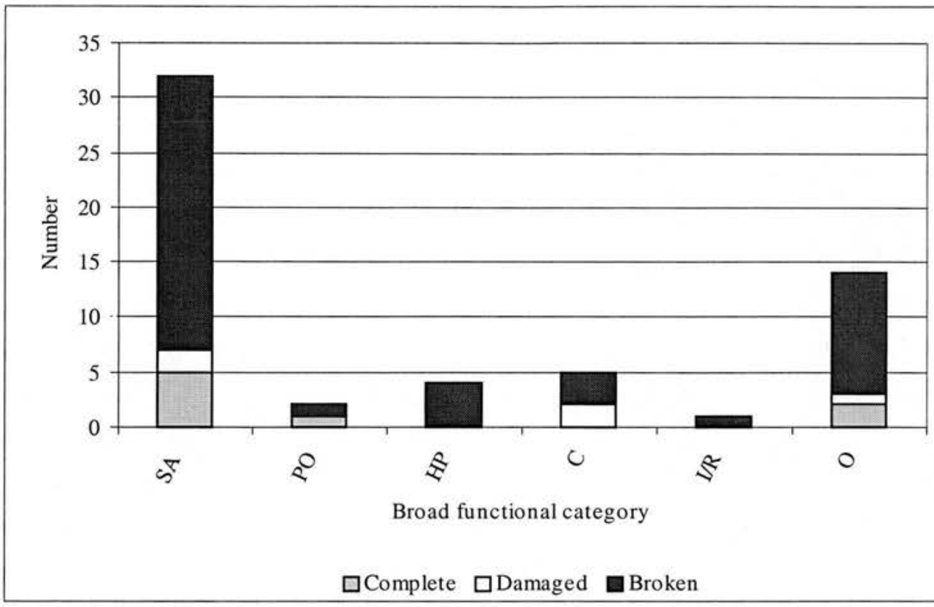

Figure 15. Occurrence of artefacts in Sabi Abyad, Building 6.II, Room 7, by broad functional category.

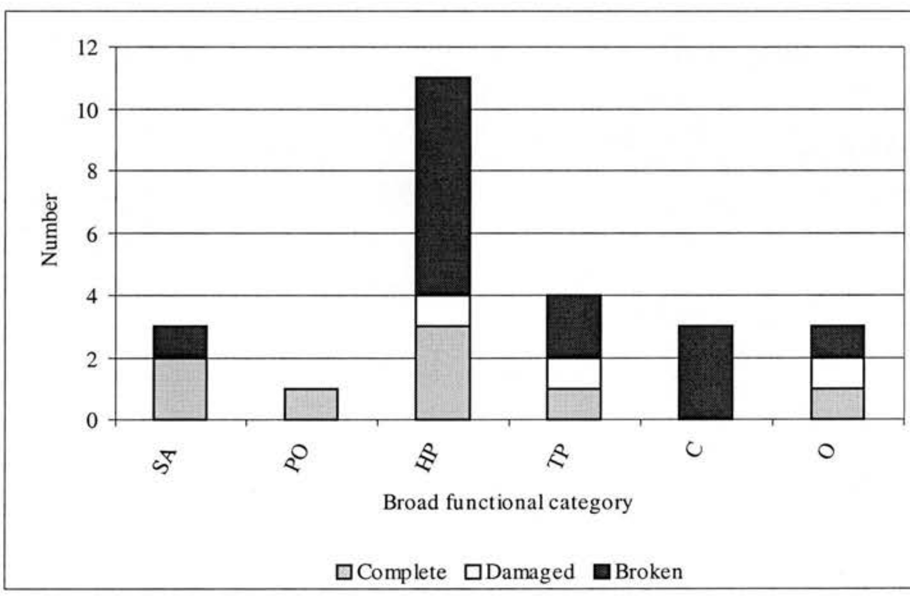

Figure 16. Occurrence of artefacts from Sabi Abyad, Building 6.II, 'other rooms', by broad functional category and condition.

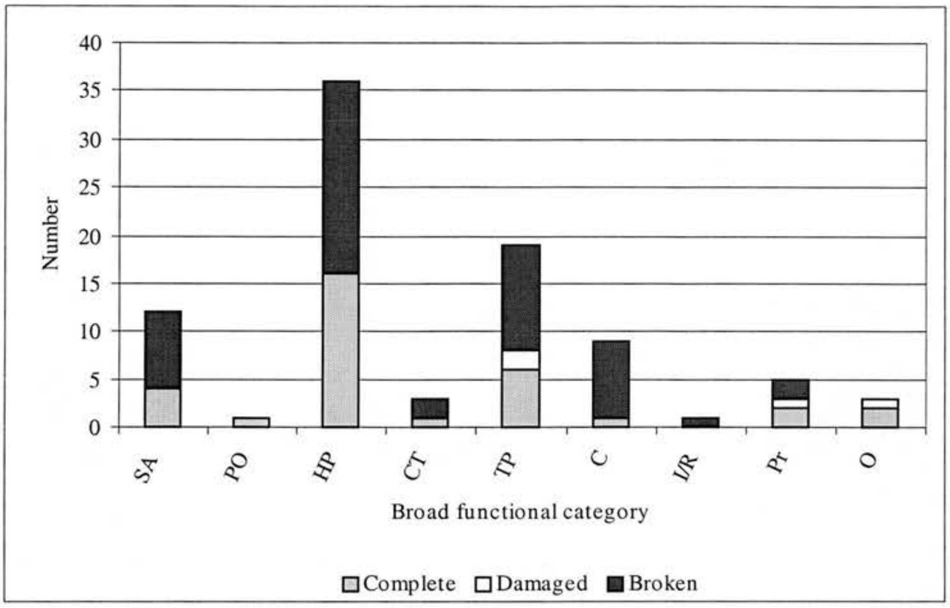

Figure 17. Occurrence of artefacts from Sabi Abyad, Building 6.II, ‘other contexts’ (including mixed contexts), by broad functional category and condition.

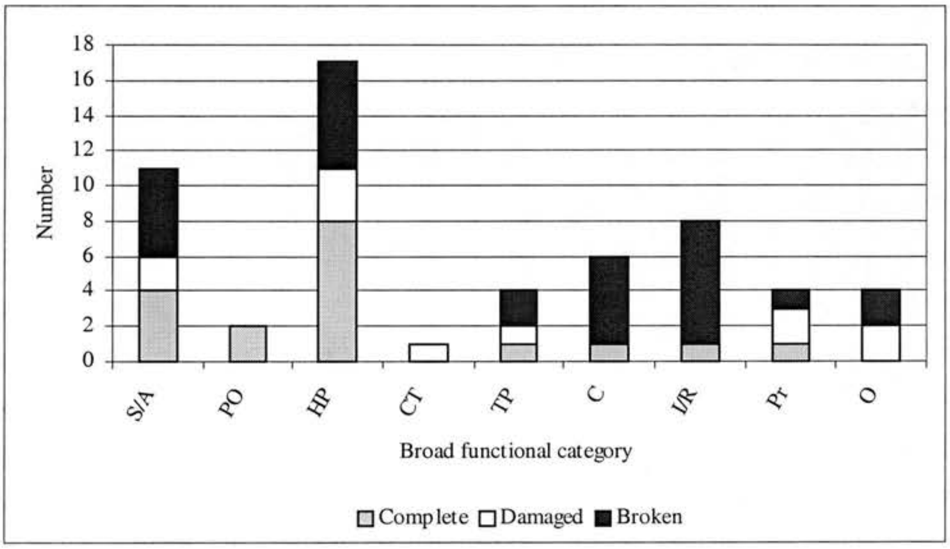

Figure 18. Occurrence of artefacts from Sabi Abyad, Building 6.IX, by broad functional category and condition.

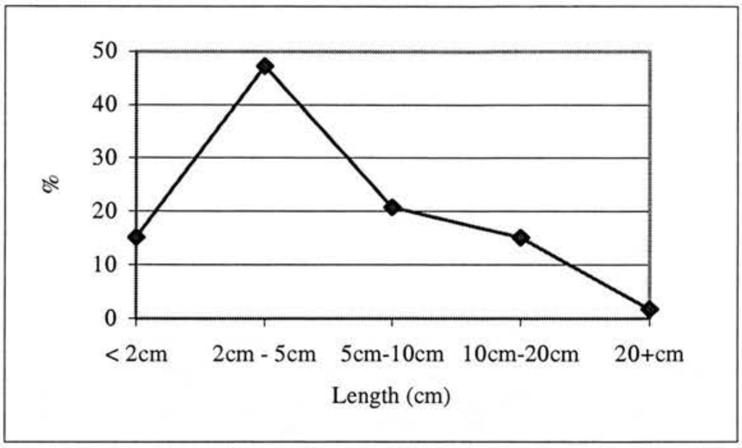

Figure 19. Occurrence of artefacts from Tell Sabi Abyad, Building IX, by longest dimension.

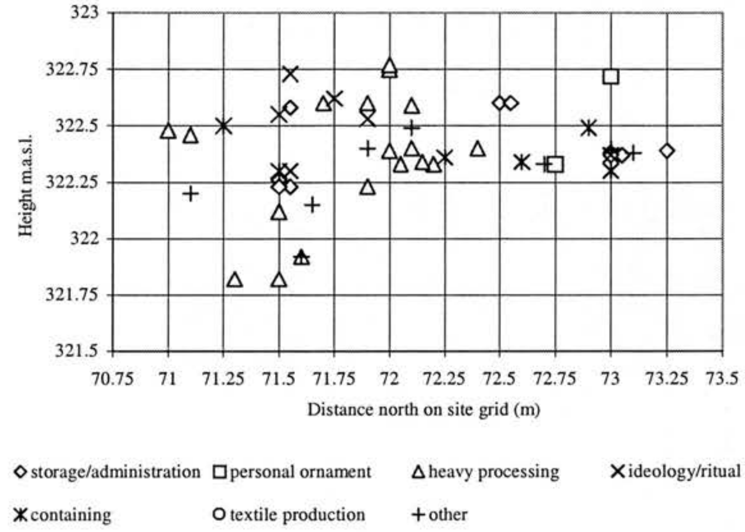

Figure 20. Vertical distribution of artefacts from Tell Sabi Abyad, Building 6.IX, by broad function category.

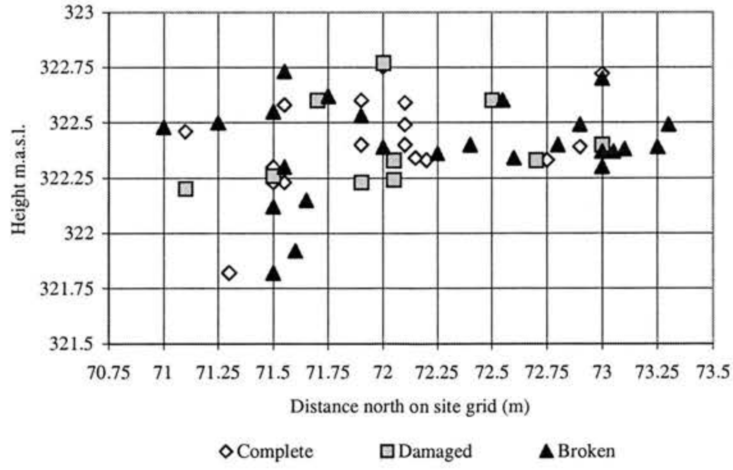

Figure 21. Vertical distribution of artefacts from Tell Sabi Abyad, Building 6.IX, by condition.

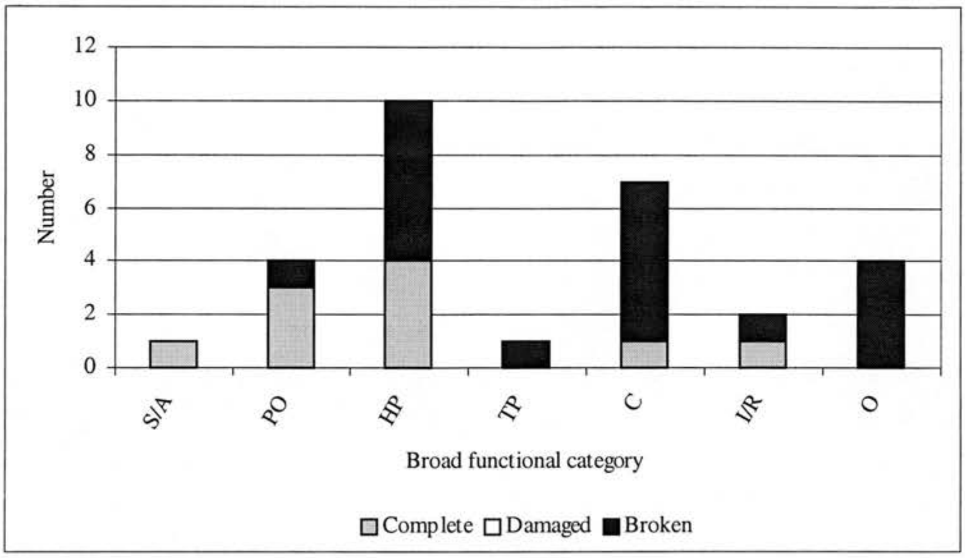

Figure 22. Occurrence of artefacts from Tell Sabi Abyad, Building 6.XII, by broad functional category

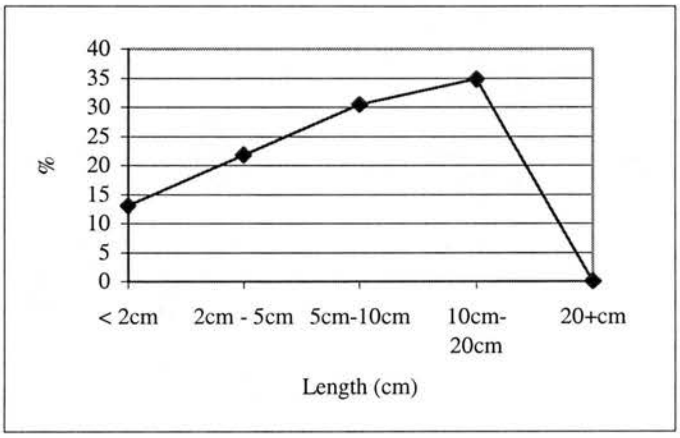

Figure 23. Occurrence of artefacts from Tell Sabi Abyad, Building 6.XII, by longest dimension.

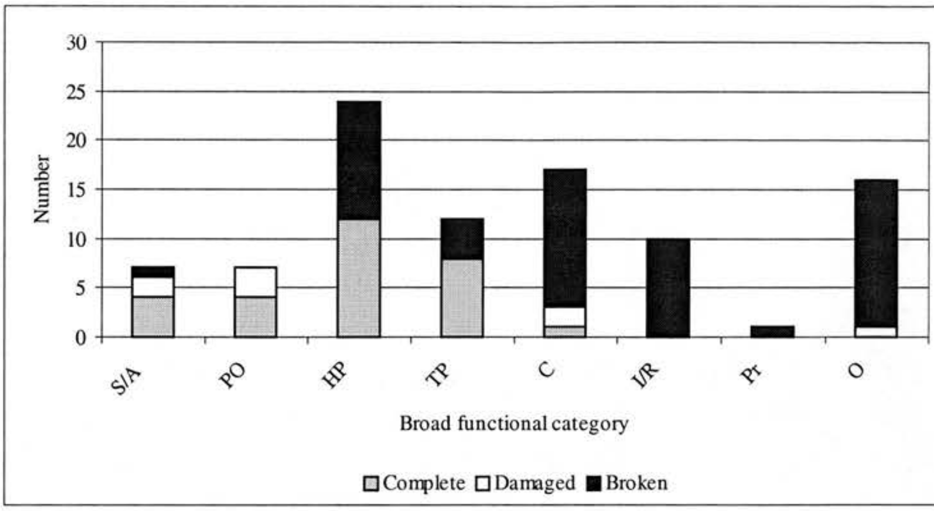

Figure 24. Occurrence of artefacts from Tell Sabi Abyad, Building 6.XIV, by broad functional category and condition.

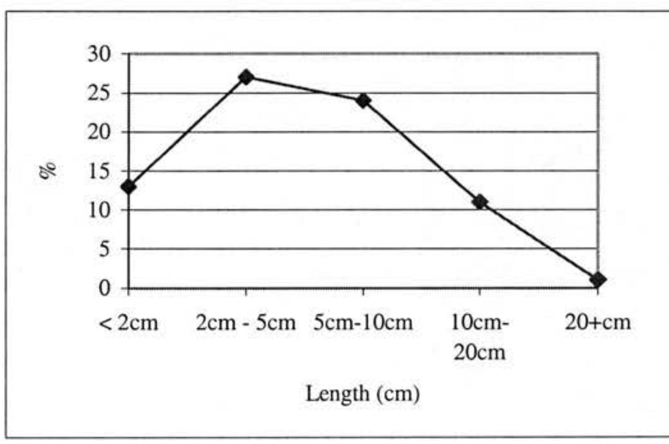

Figure 25. Occurrence of artefacts by from Tell Sabi Abyad, Building 6.XIV, by longest dimension.

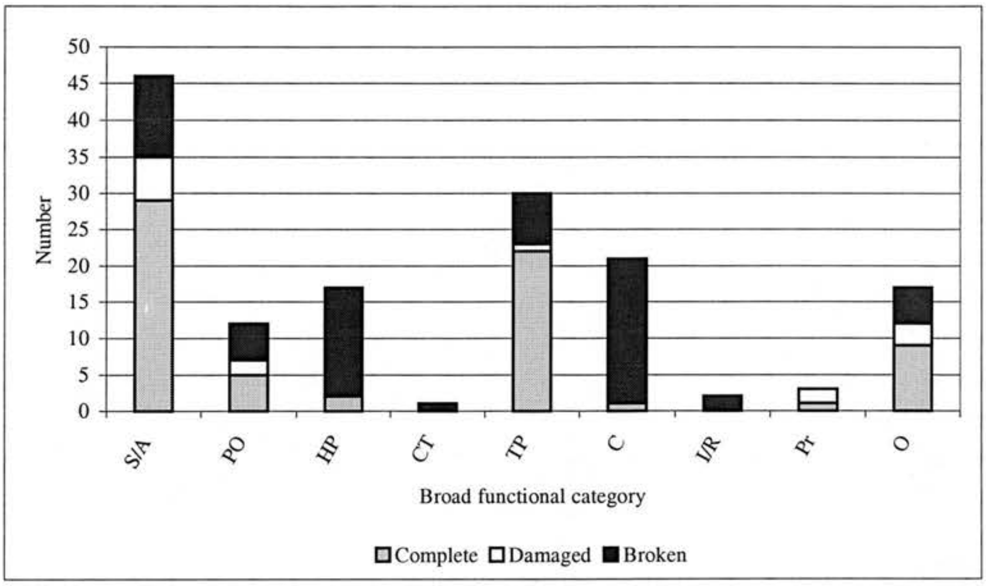

Figure 26. Occurrence of artefacts from Tell Sabi Abyad, Building 6.XIV, Room 2, by broad functional category and condition.

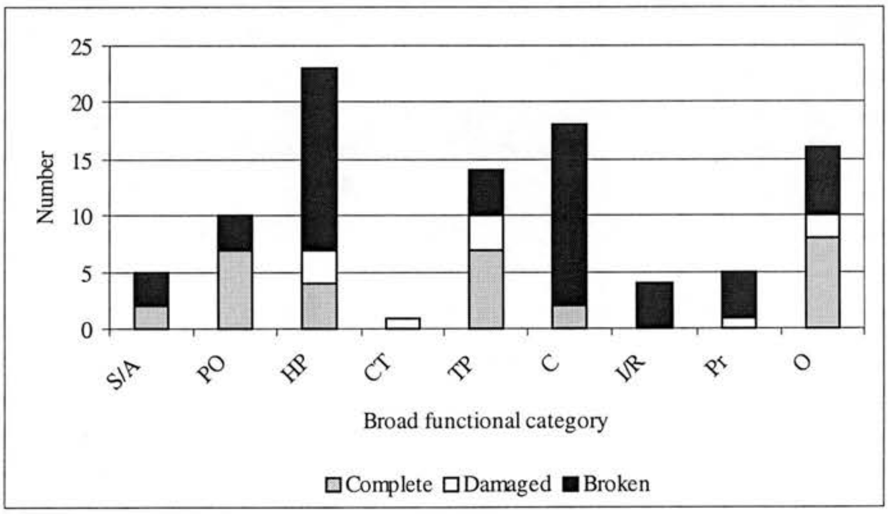

Figure 27. Occurrence of artefacts from Tell Sabi Abyad, Level 6, Open Areas 1-6, by broad functional category and condition.

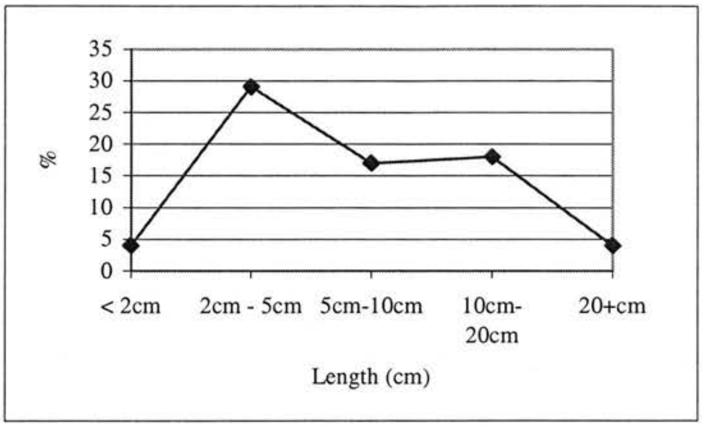

Figure 28. Occurrence of artefacts by from Tell Sabi Abyad, Open Area 1-6, by longest dimension.

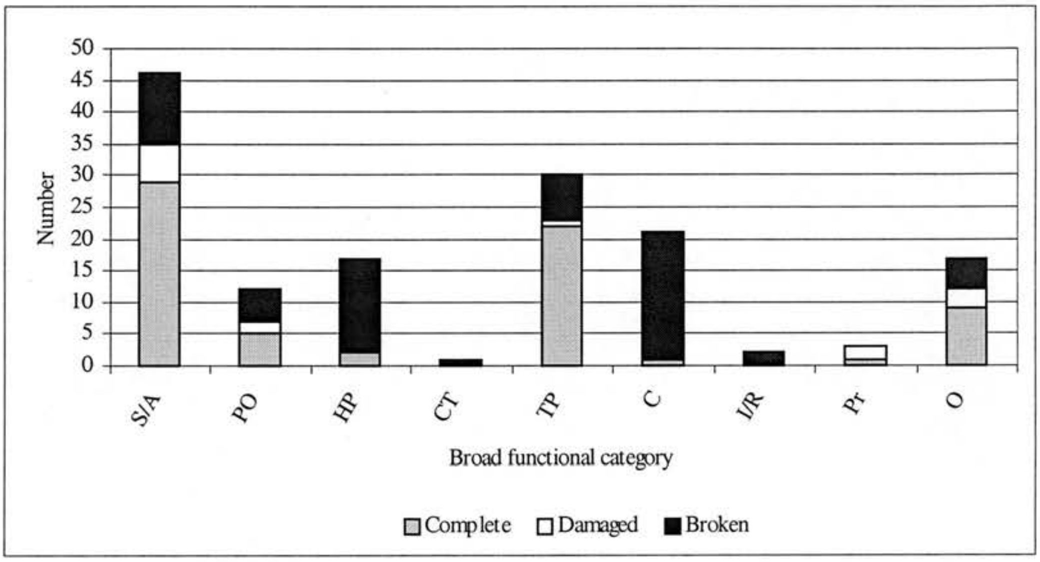

Figure 29. Occurrence of artefacts from Tell Sabi Abyad, T12 midden deposits, by broad functional category and condition

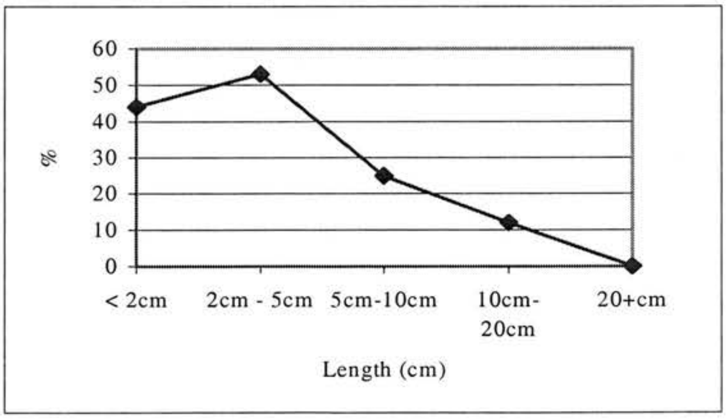

Figure 30. Occurrence of artefacts by from Tell Sabi Abyad, T12 midden deposits, by longest dimension.

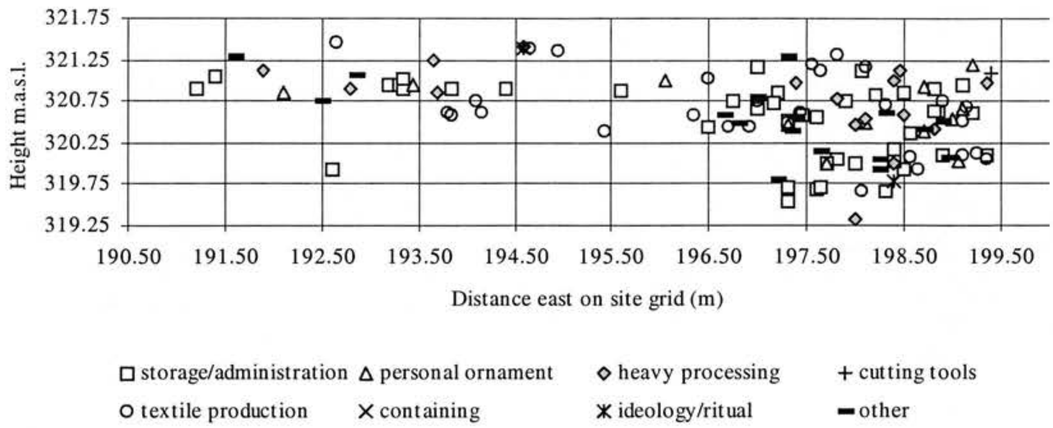

Figure 31. Vertical distribution of artefacts from Tell Sabi Abyad, T12 midden deposits, by broad functional category.

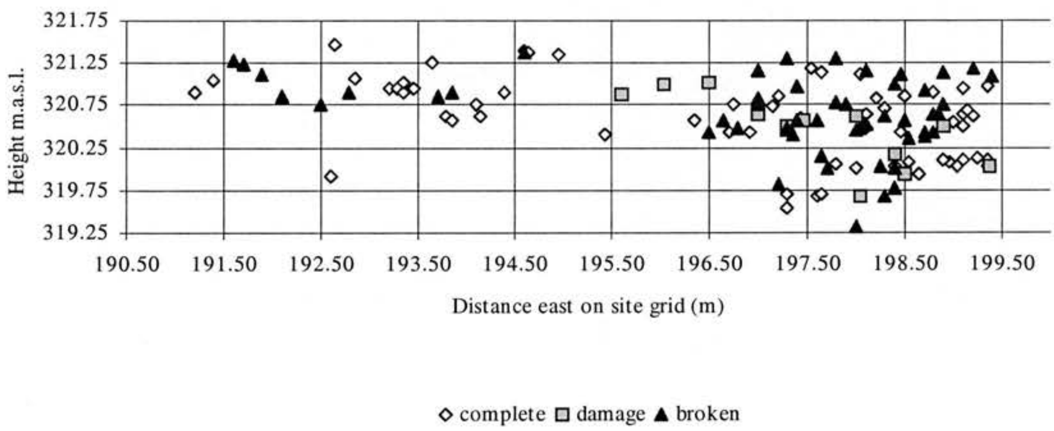

Figure 32. Vertical distribution of artefacts from Tell Sabi Abyad, T12 midden deposits, by condition.

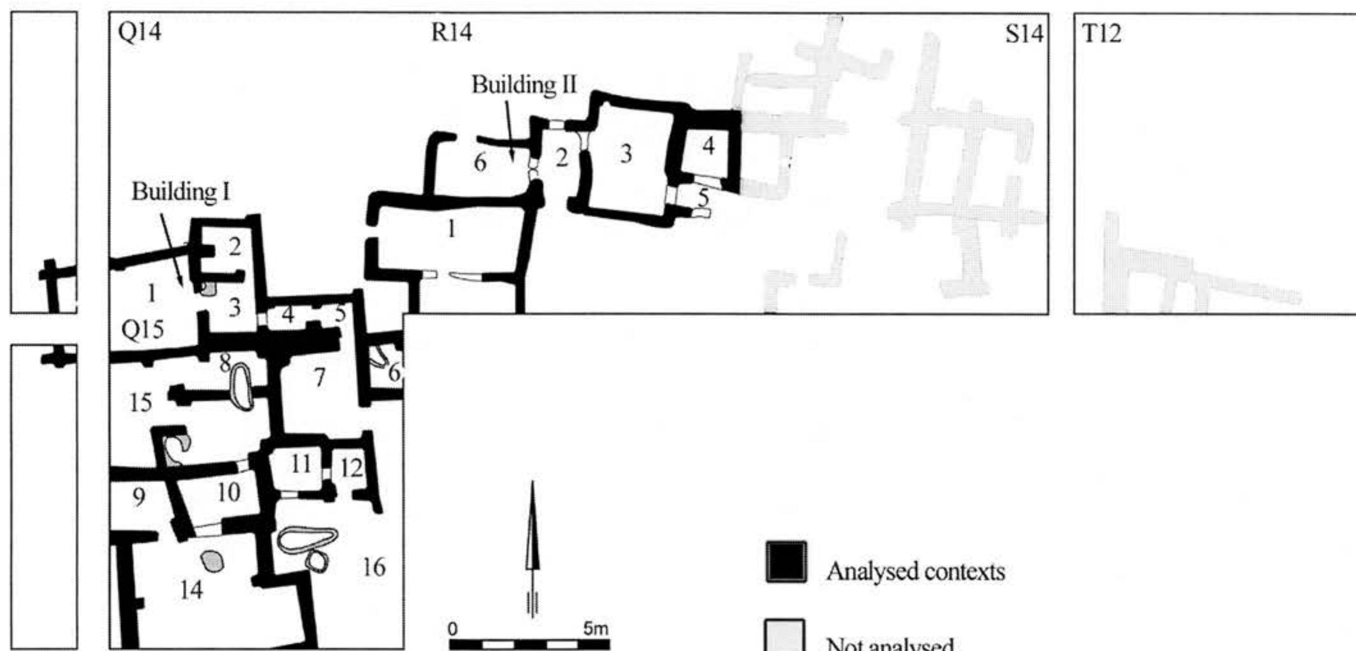

Figure 33. Plan of Tell Sabi Abyad, Level 5. (after a drawing by P. Collet)

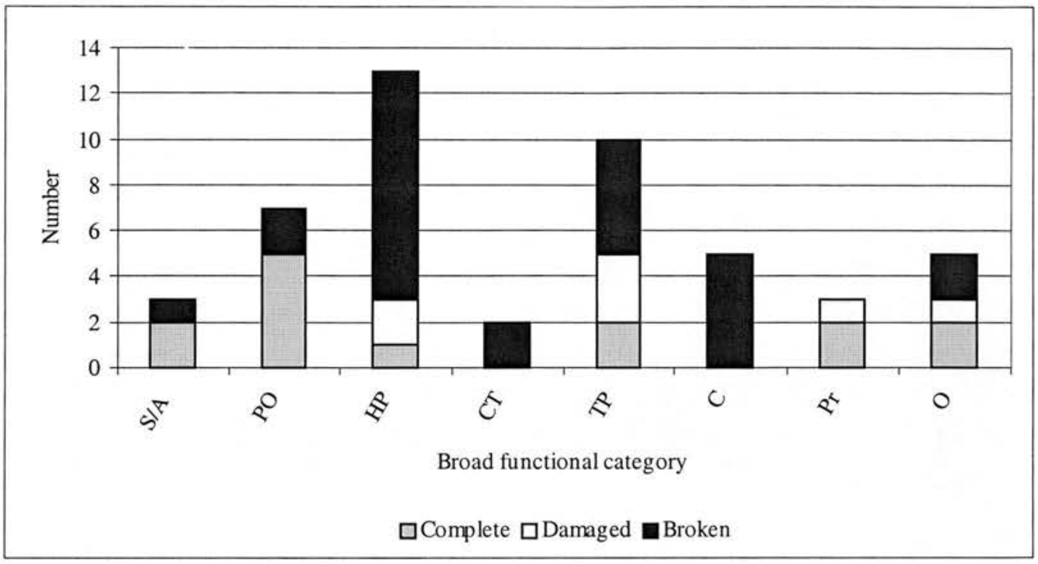

Figure 34. Occurrence of artefacts from Tell Sabi Abyad, Building 5.I, by broad functional category and condition.

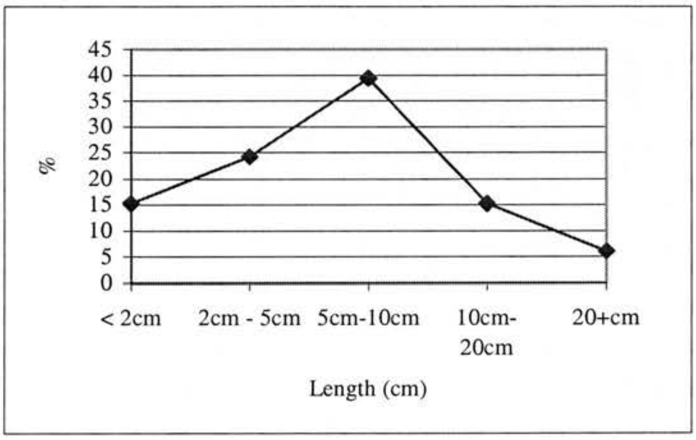

Figure 35. Occurrence of artefacts by from Tell Sabi Abyad, Building 5.I, by longest dimension.

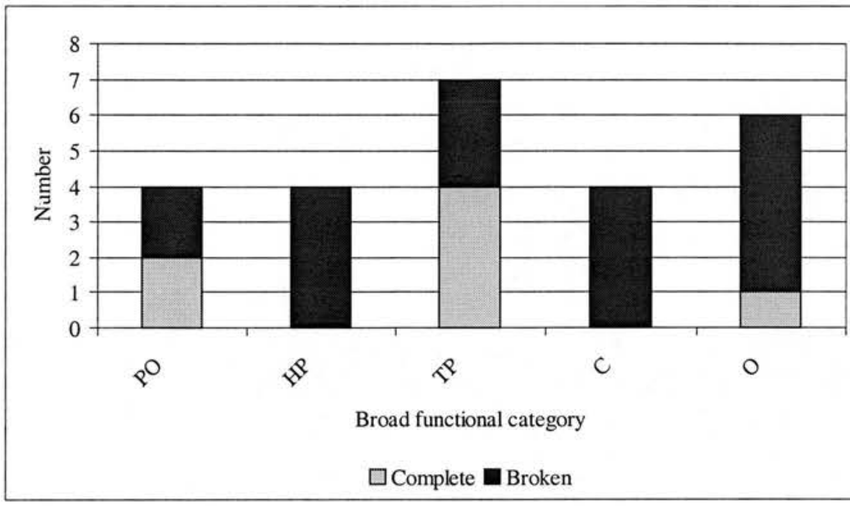

Figure 36. Occurrence of artefacts in Tell Sabi Abyad, Building 5.II, by broad functional category and condition.

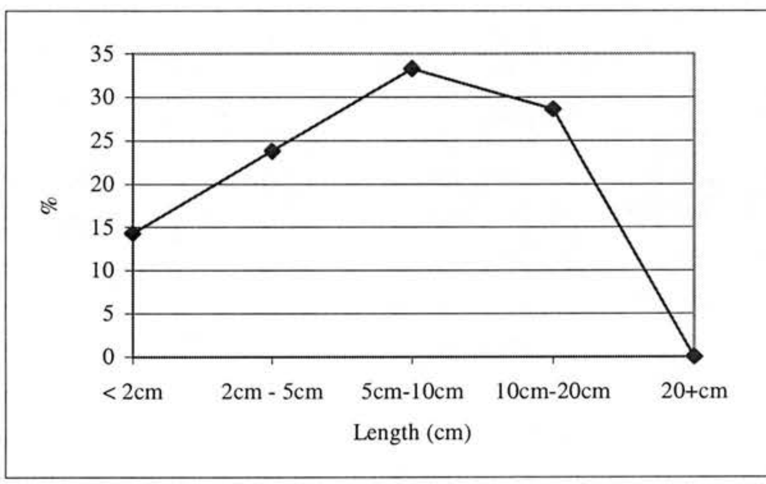

Figure 37. Occurrence of artefacts by from Tell Sabi Abyad, Building 5.II, by longest dimension.

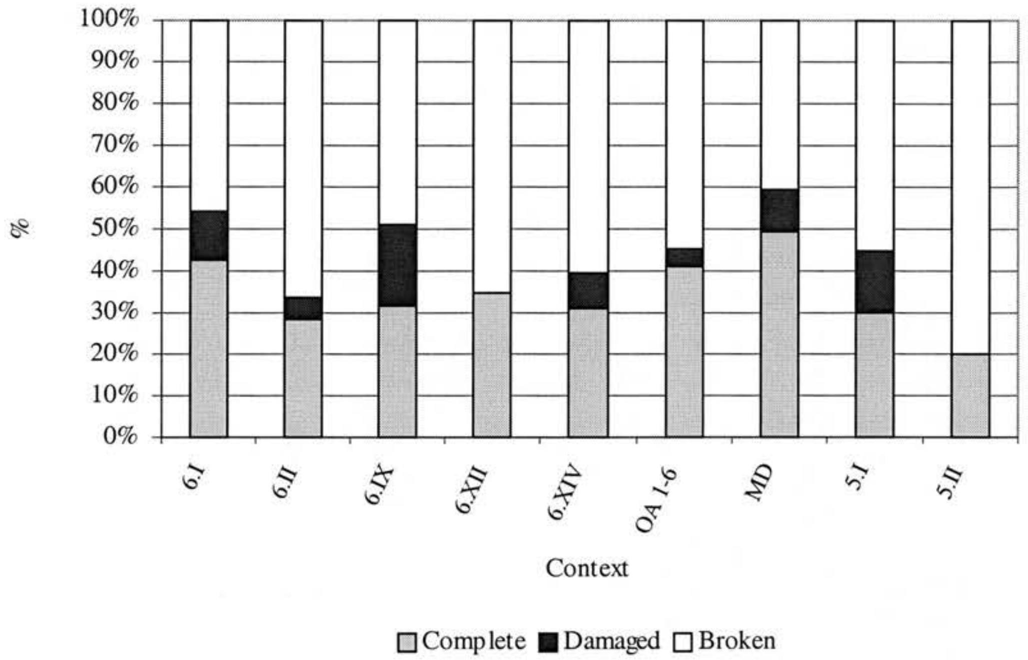

Figure 38. Percentage proportions of artefact assemblages (including sealings) from Tell Sabi Abyad, by context and condition.

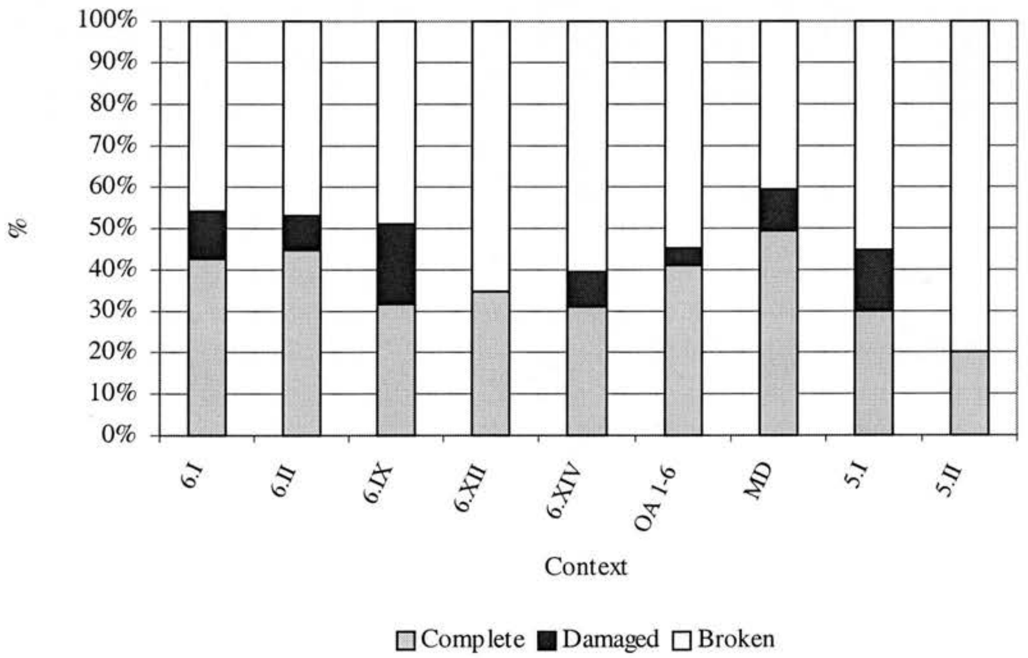

Figure 39. Percentage proportions of artefact assemblages (not including sealings) from Tell Sabi Abyad, by condition.

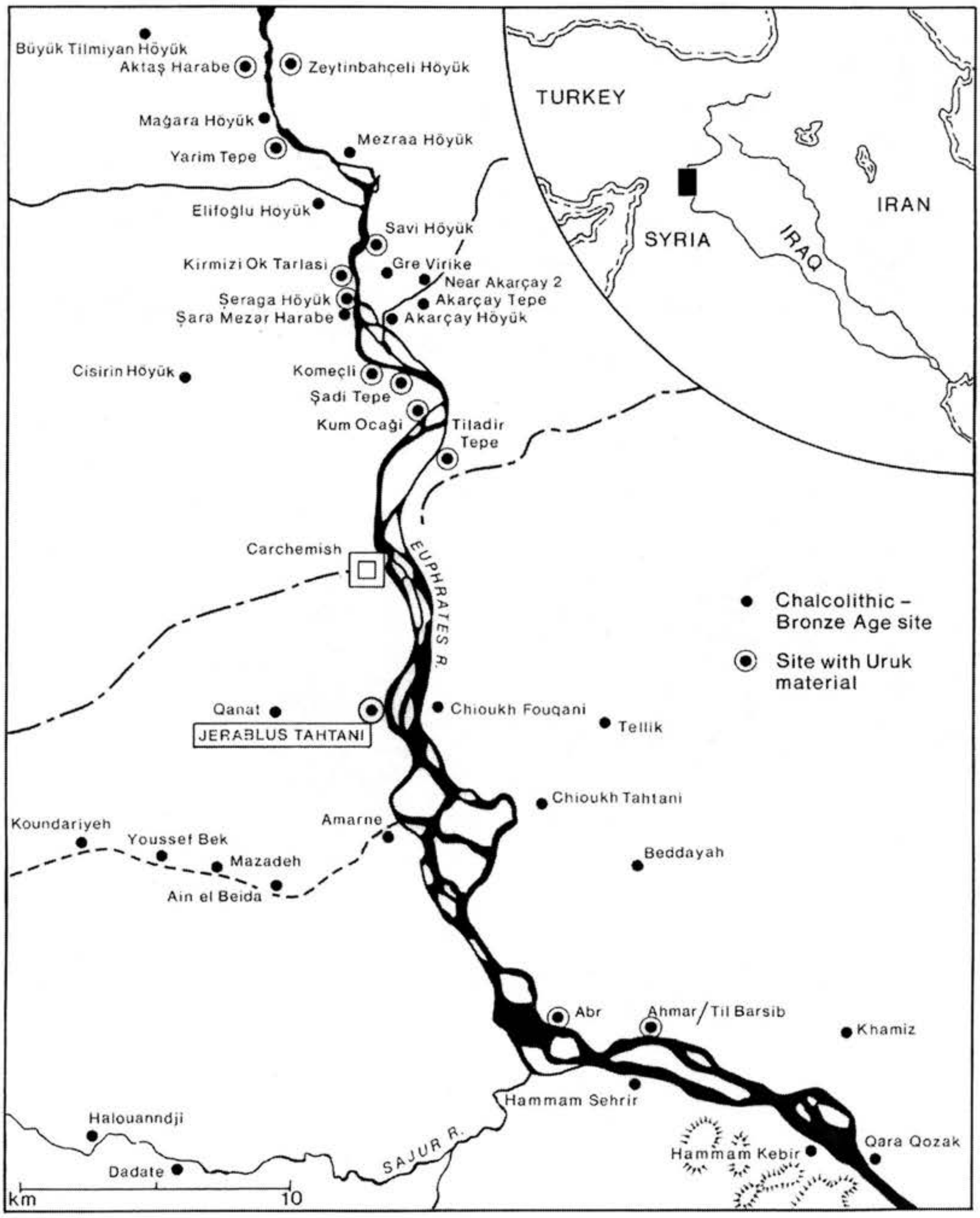

Figure 40. Map showing the location of Tell Jerablus Tahtani near the Syro-Turkish border. (drawing by Gordon Thomas)

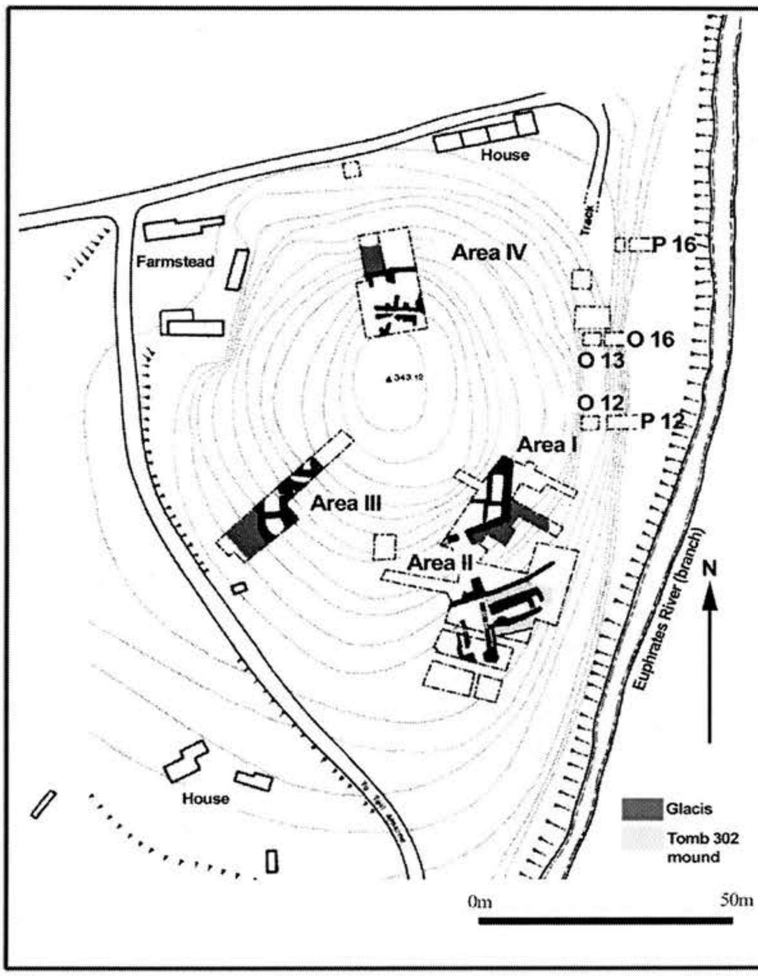

Figure 41. Tell Jerablus Tahtani site plan showing the location of excavation areas discussed in text. (after a drawing by G. Thomas)

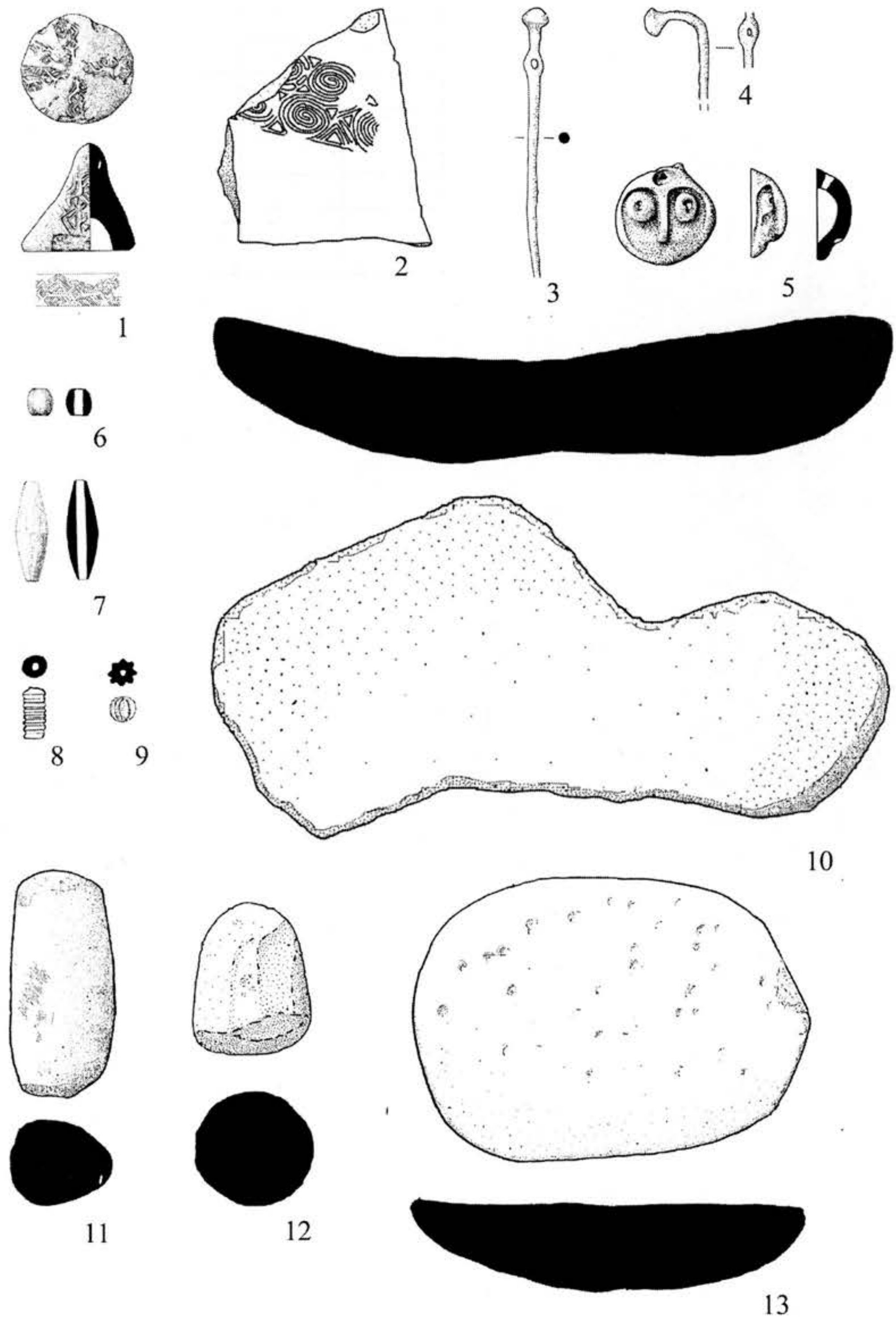

Figure 42. Artefacts associated with the categories of storage/administration (1-2), personal ornament (3-9) and heavy processing (10-13) from Tell Jerablus Tahtani, various levels. Scale 1:1 (6-9); 1:2 (2-5); 1:3 (1); 1:4 (11-13); 1:6 (10,13). (drawings by J. van der Post and A. Jackson)

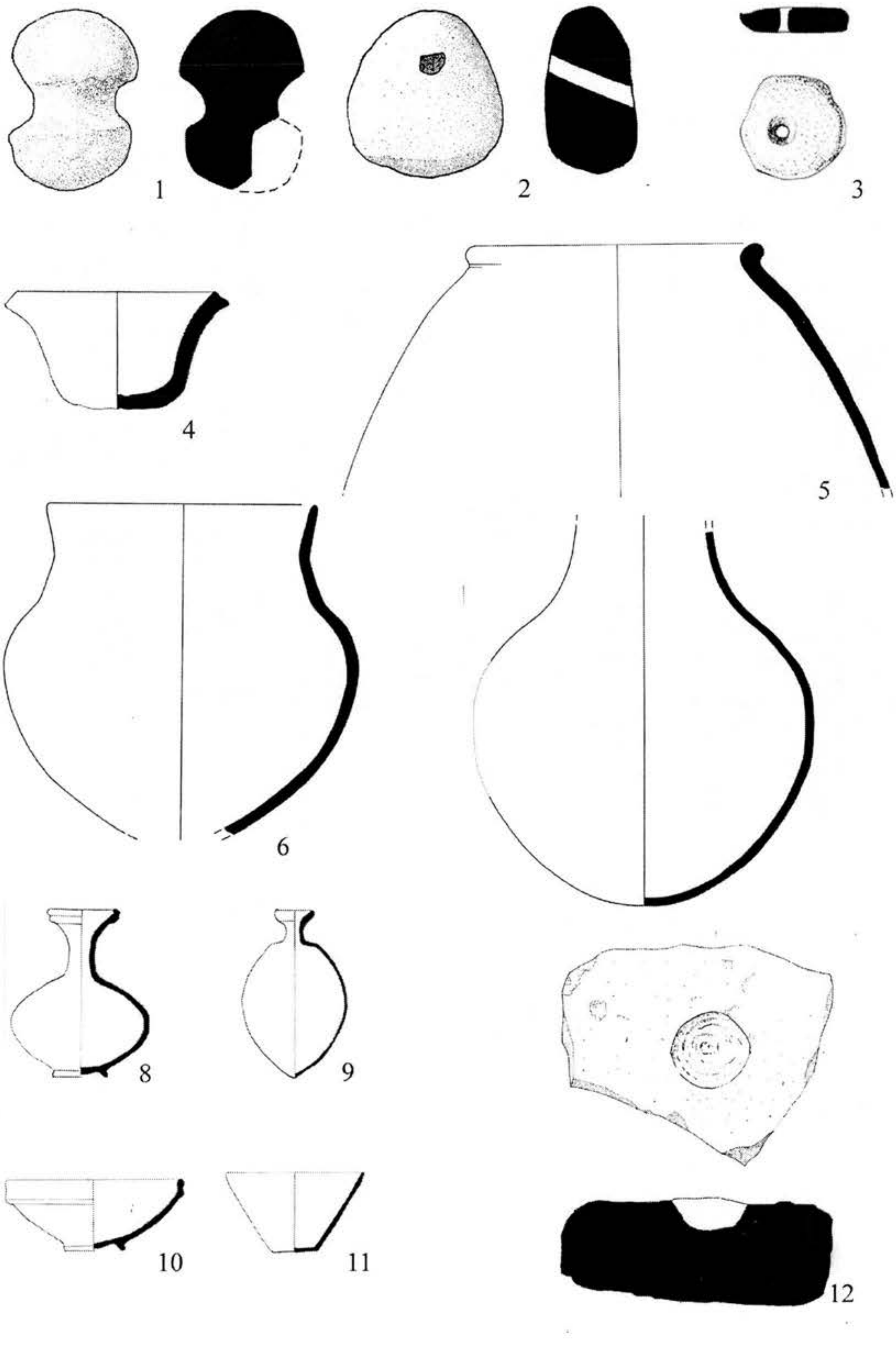

Figure 43. Artefacts associated with the categories of textile production (1-3), containing (4-11) and other (12) from Tell Jerablus Tahtani, various levels. Scale 1:2 (1-3); 1:6 (4-12). (drawings by J. van der Post and A. Jackson)

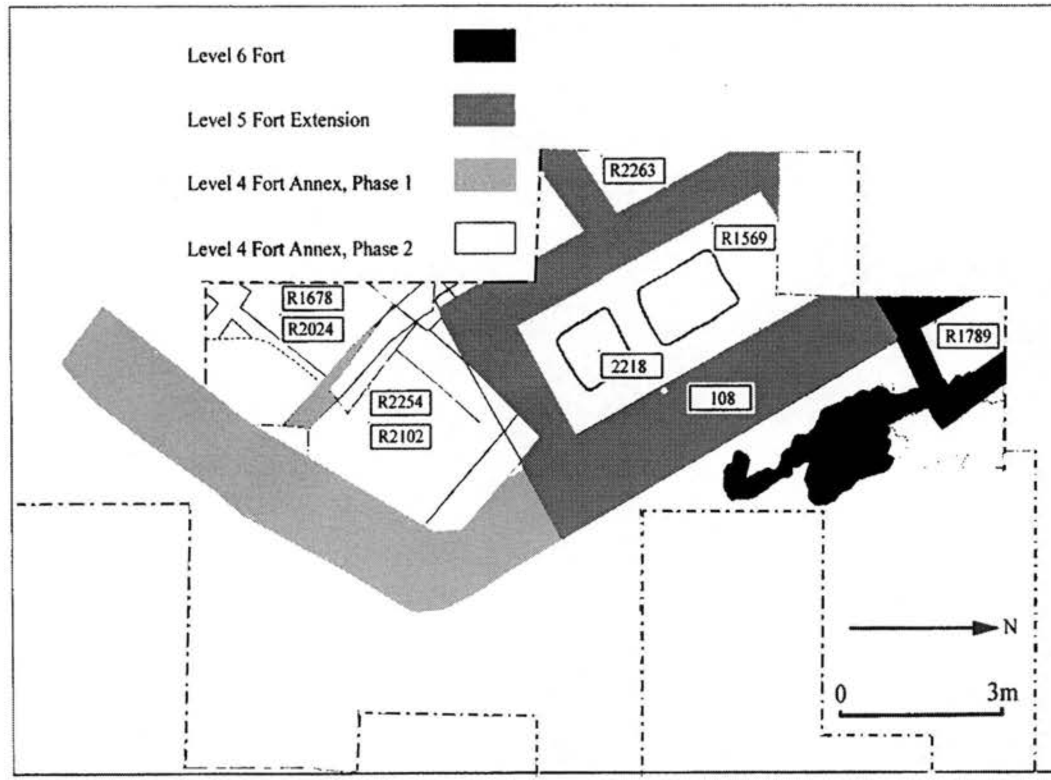

Figure 44. Plan of Jerablus, Area I, Levels 4-6.

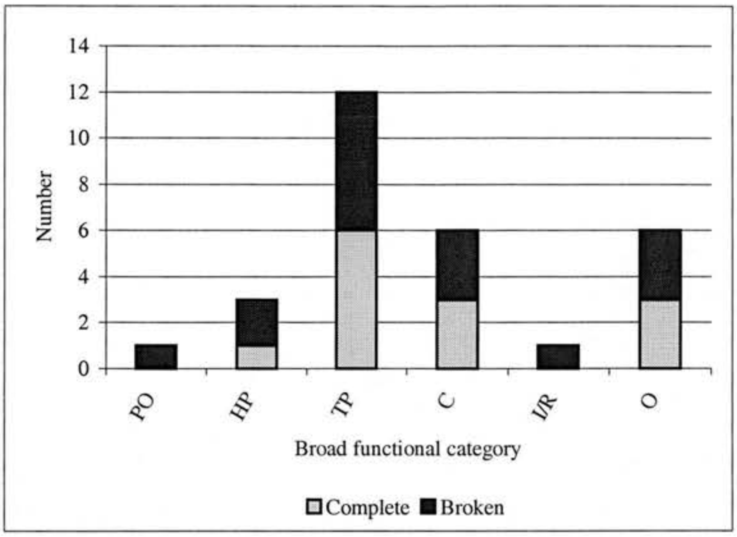

Figure 45. Occurrence of artefacts from Jerablus, Area I, Level 4.1, by broad functional category.

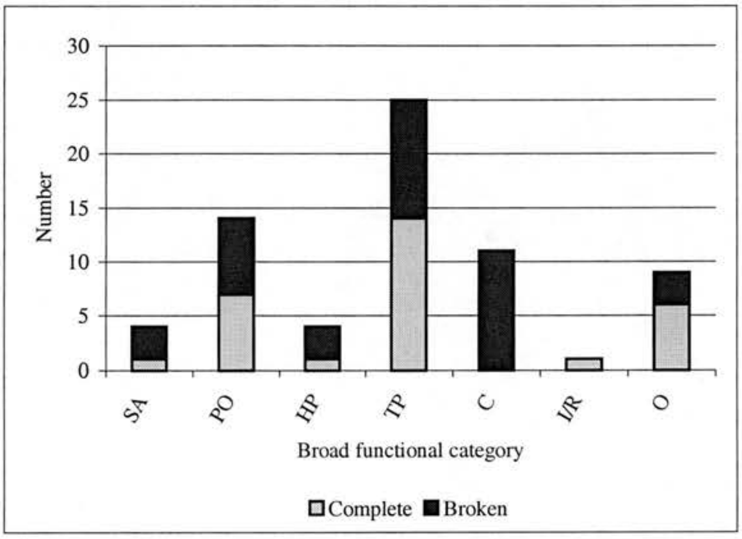

Figure 46. Occurrence of artefacts from Jerablus, Area I, Level 4.2, by broad functional category.

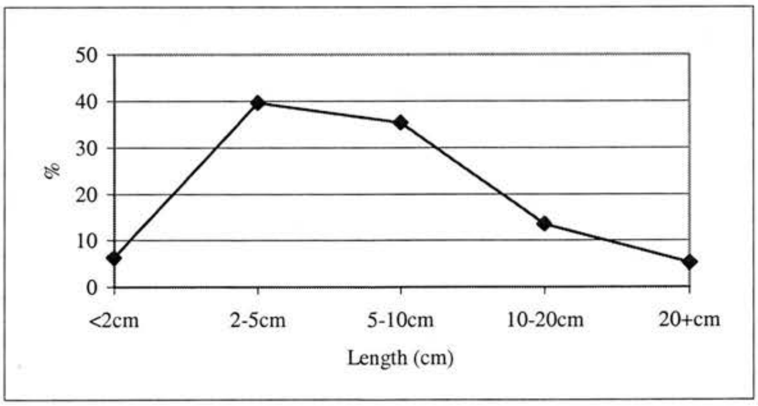

Figure 47. Occurrence of artefacts from Jerablus, Area I, Level 4, both phases, by longest dimension.

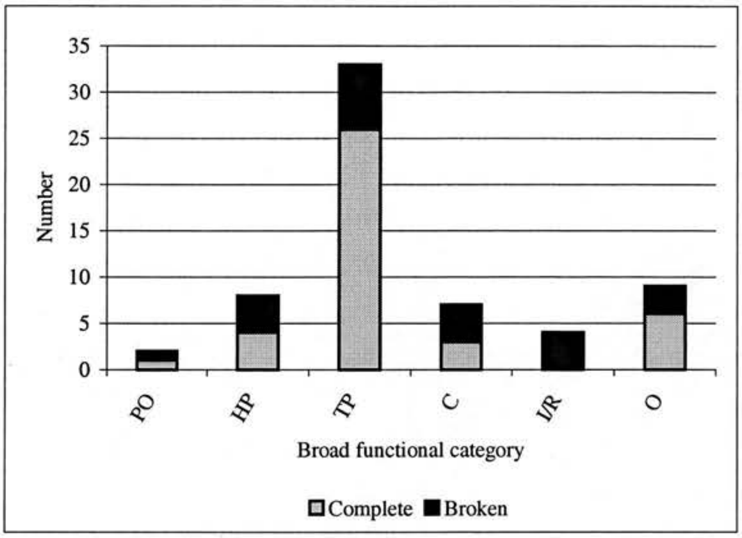

Figure 48. Occurrence of artefacts from Jerablus, Area I, Level 5, by broad functional category.

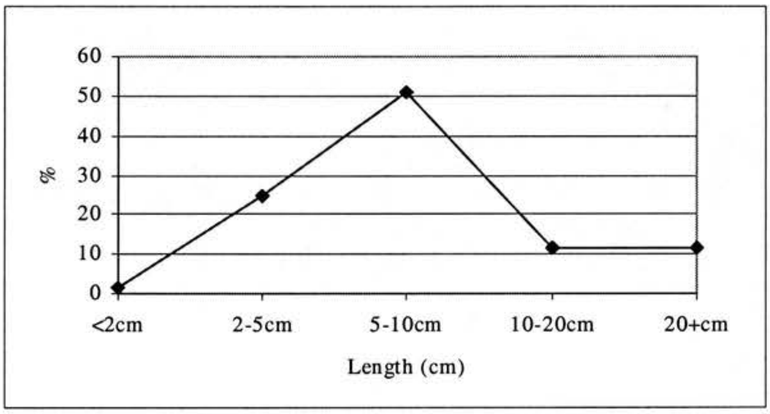

Figure 49. Occurrence of artefacts from Jerablus, Area I, Level 5, by longest dimension.

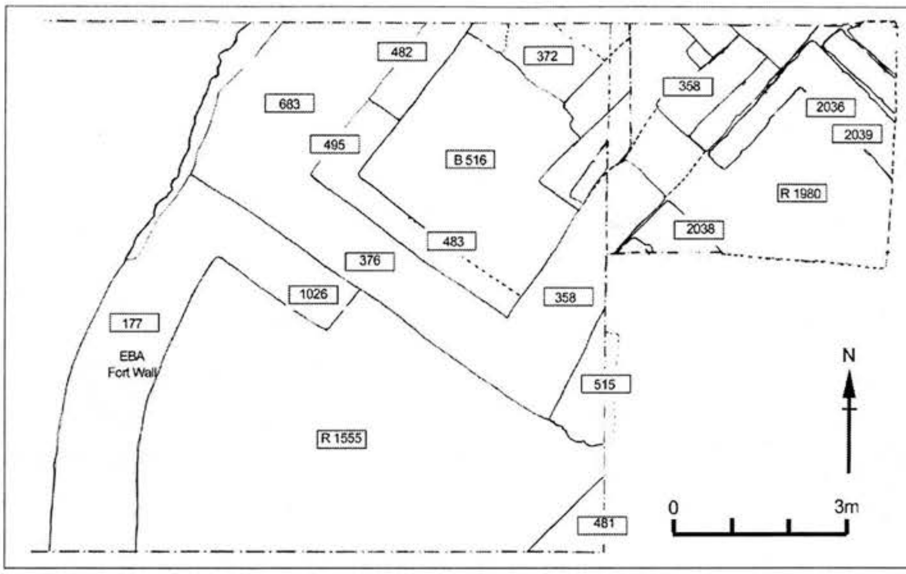

Figure 50. Plan of Jerablus, Area III, Levels 4-6.

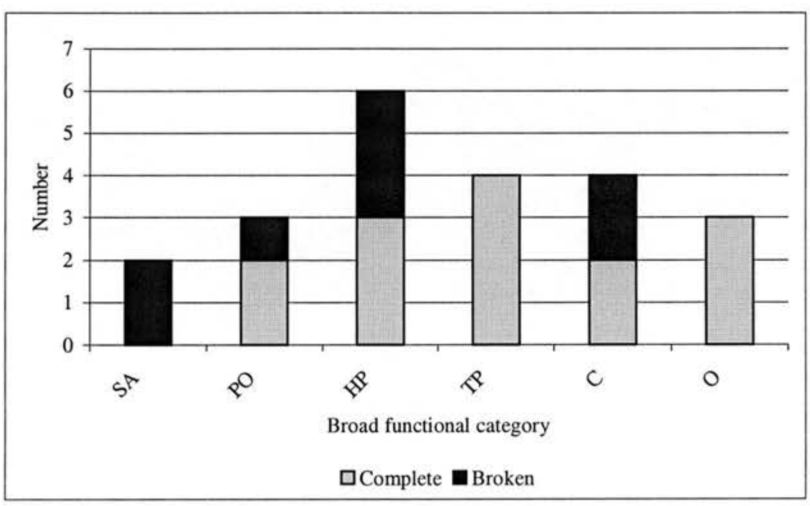

Figure 51. Occurrence of artefacts from Jerablus, Area III, Level 4 contexts, by broad functional category and condition.

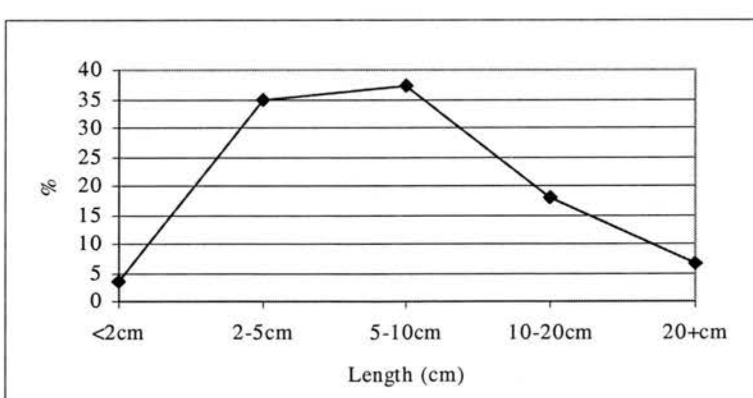

Figure 52. Occurrence of artefacts from Jerablus, Area III, Level 4 contexts, by longest dimension.

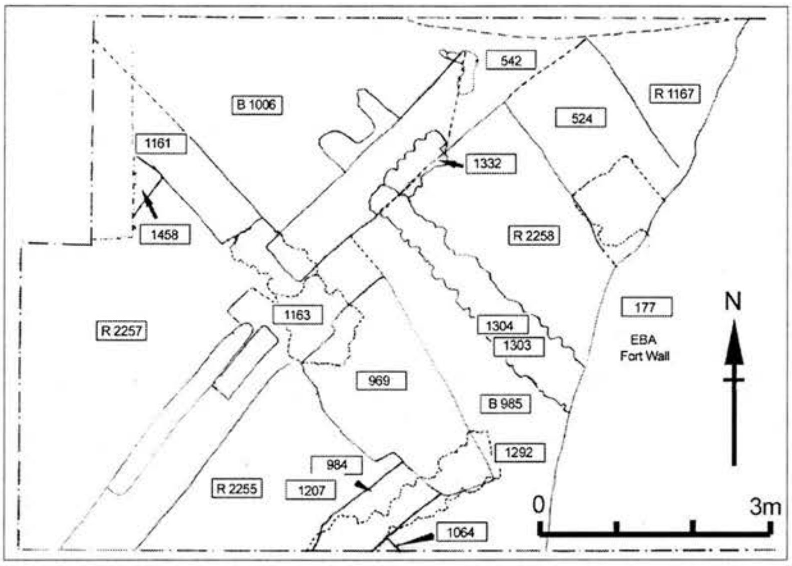

Figure 53. Plan of Jerablus, Area III, Level 7.

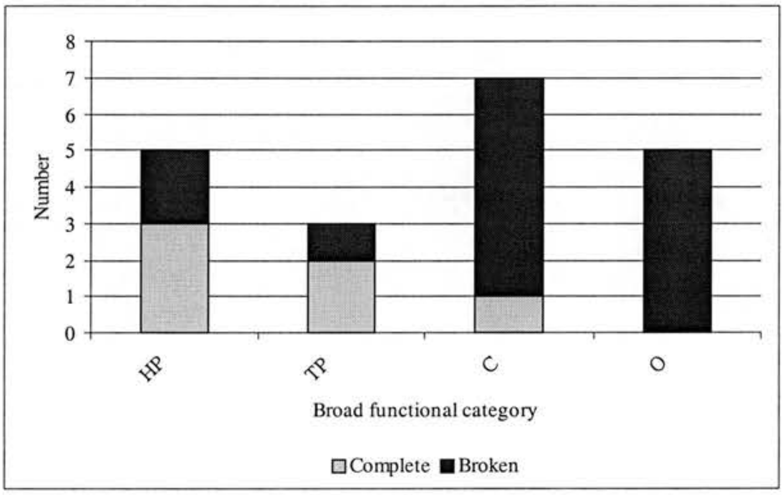

Figure 54. Occurrence of artefacts from Jerablus, Area III, Level 7, by broad functional category and condition.

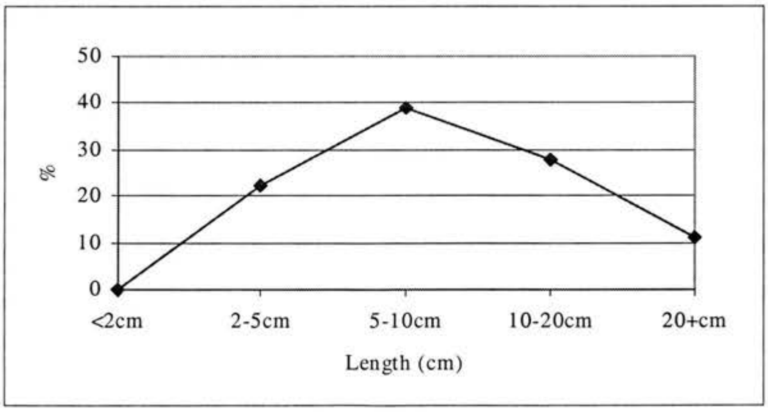

Figure 55. Occurrence of artefacts from Jerablus, Area III, Level 7, by longest dimension.

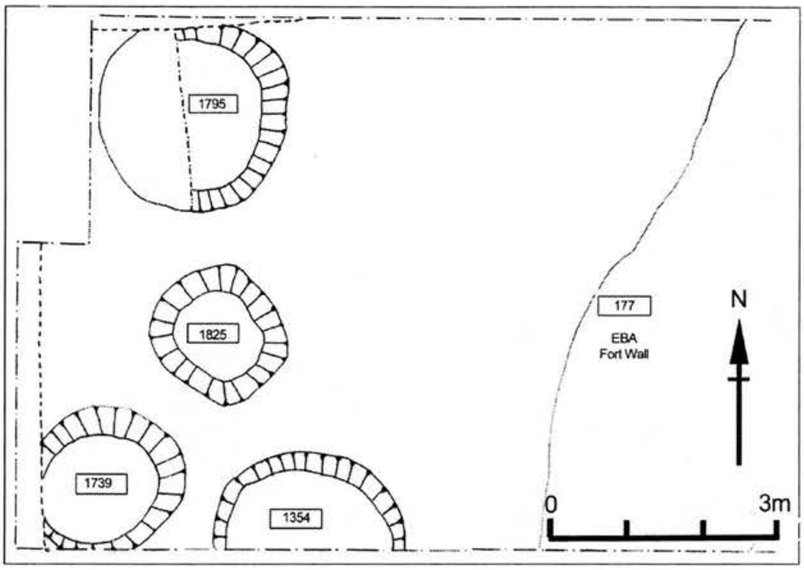

Figure 56. Plan of Jerablus, Area III, Level 8.

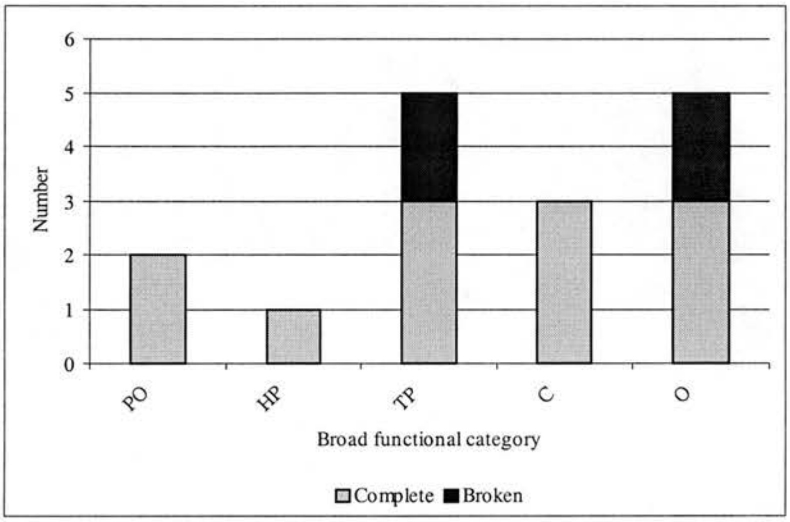

Figure 57. Occurrence of artefacts from Jerablus, Area III, Level 8, by broad functional category and condition.

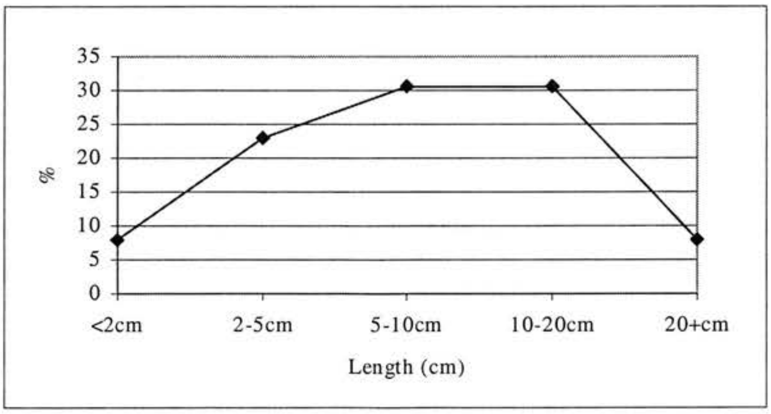

Figure 58. Occurrence of artefacts from Jerablus, Area III, Level 8, by longest dimension.

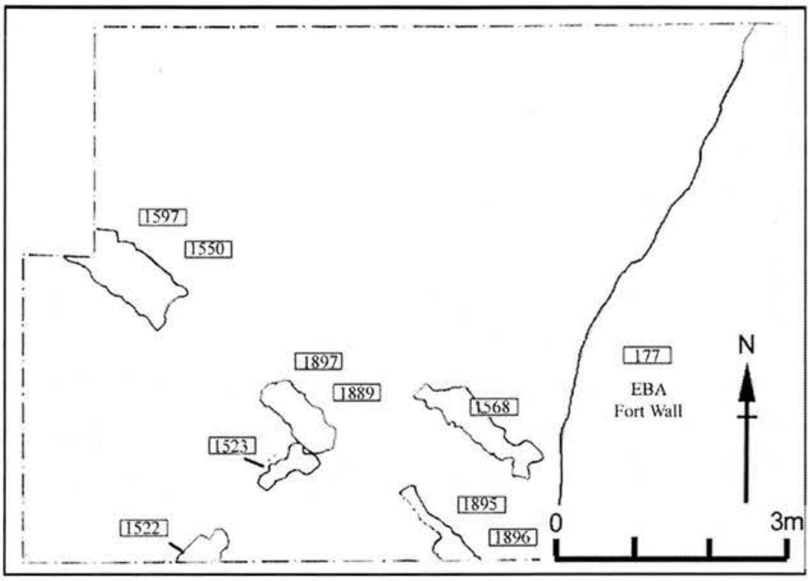

Figure 59. Plan of Jerablus, Area III, Level 9.

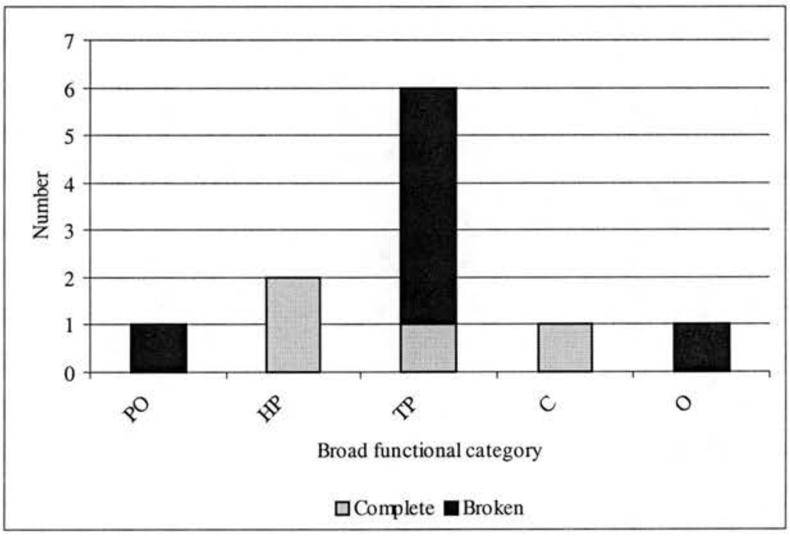

Figure 60. Occurrence of artefacts from Jerablus, Area III, Level 9 contexts, by broad functional category and condition.

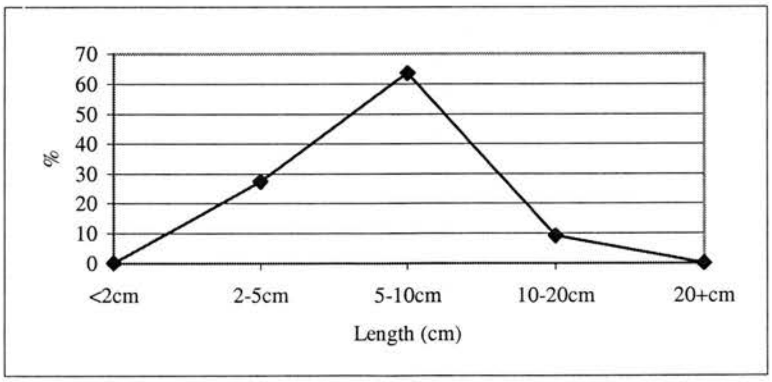

Figure 61. Occurrence of artefacts from Jerablus, Area III, Level 9 contexts, by longest dimension.

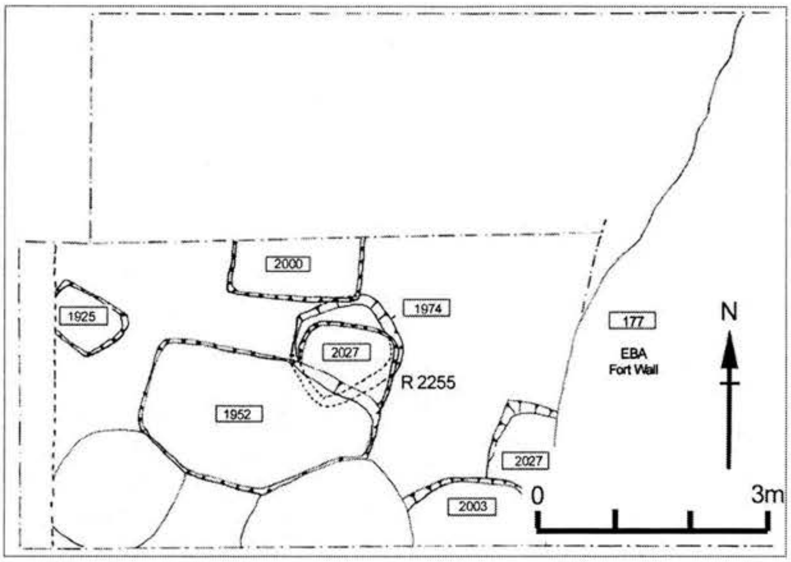

Figure 62. Plan of Jerablus, Area III, Level 10.

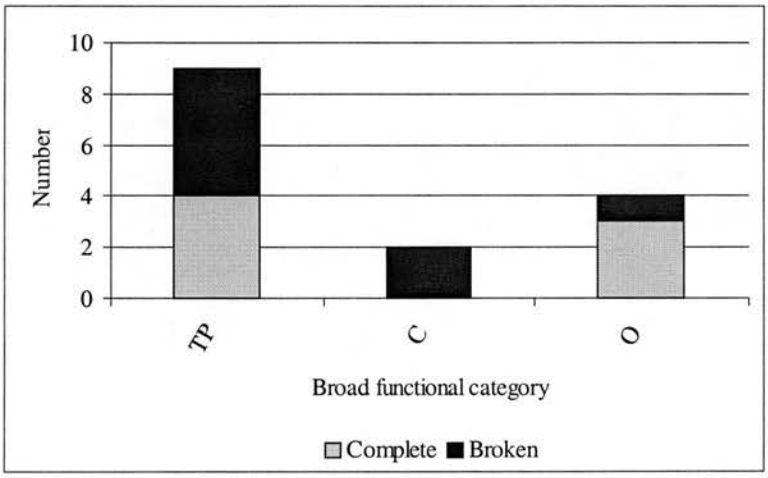

Figure 63. Occurrence of artefacts from Jerablus, Area III, Level 10, by broad functional category and condition.

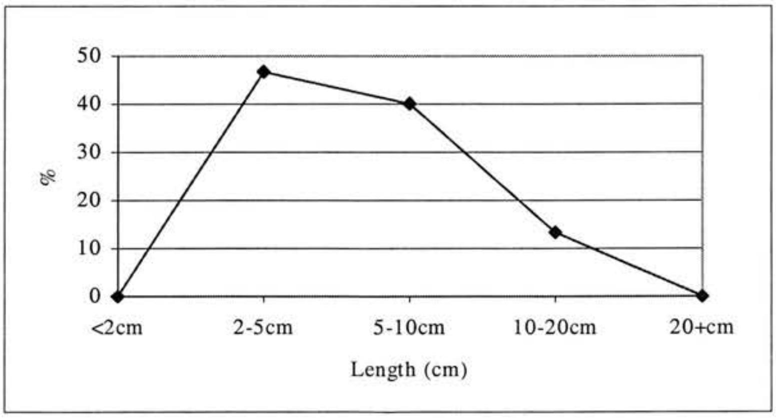

Figure 64. Occurrence of artefacts from Jerablus, Area III, Level 10, by longest dimension.

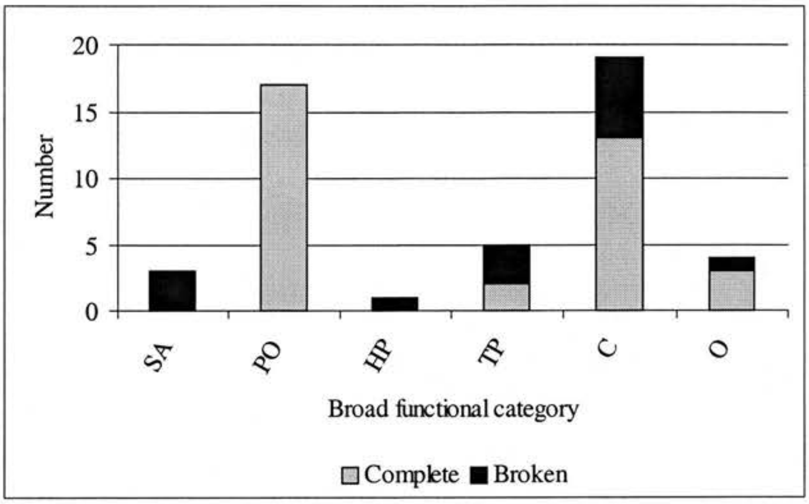

Figure 65. Occurrence of artefacts from Jerablus, Area III, Level 11, by broad functional category and condition.

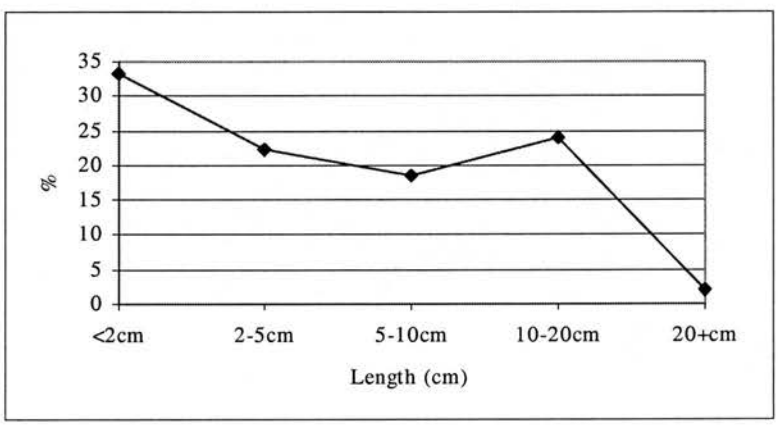

Figure 66. Occurrence of artefacts from Jerablus, Area III, Level 11, by longest dimension.

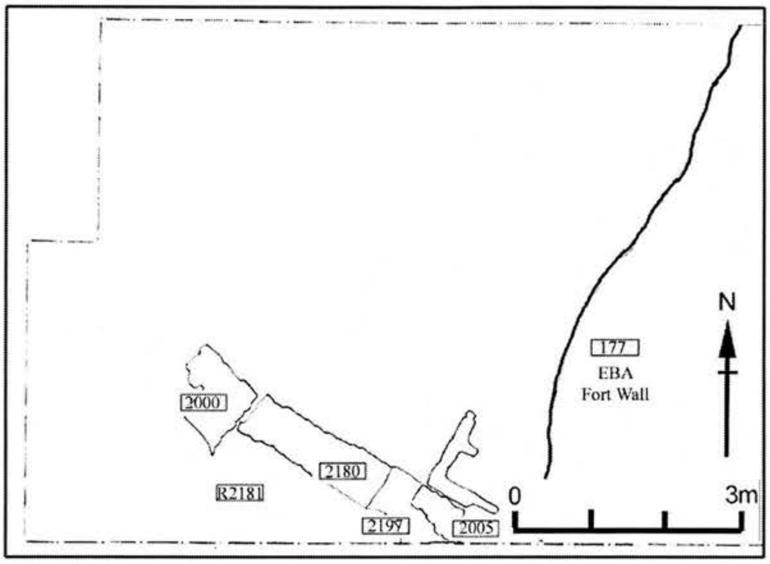

Figure 67. Plan of Jerablus, Area III, Level 12.

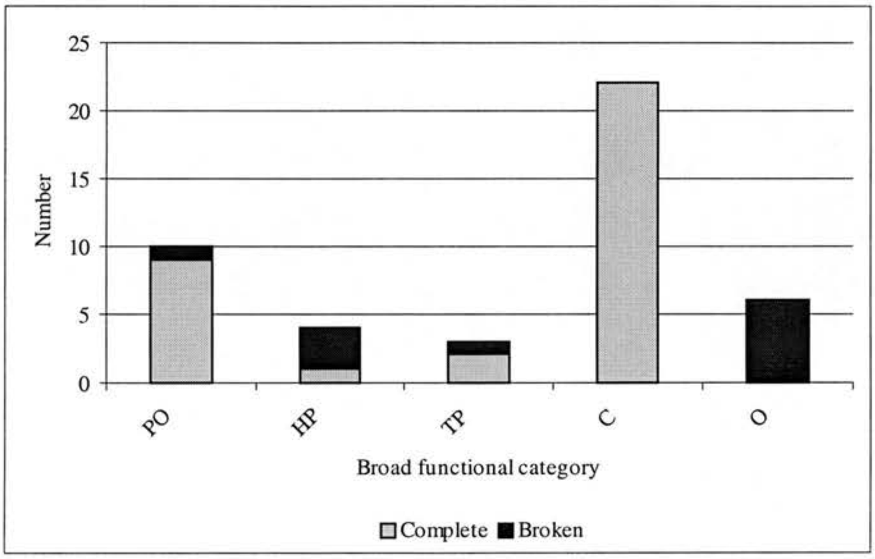

Figure 68. Occurrence of artefacts from Jerablus, Area III, Level 12, by broad functional category and condition.

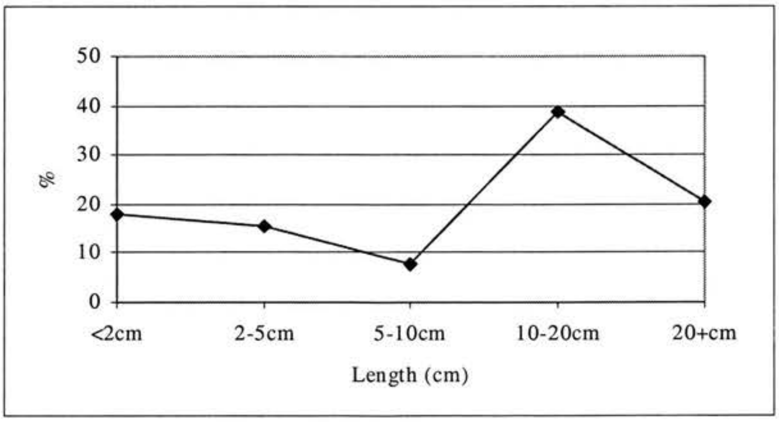

Figure 69. Occurrence of artefacts from Jerablus, Area III, Level 12, by longest dimension.

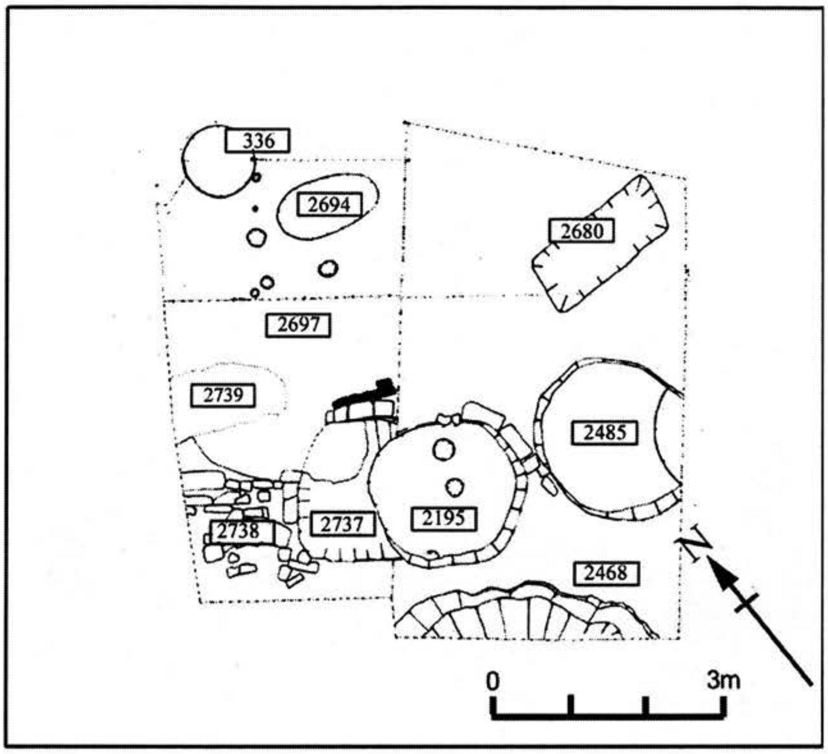

Figure 70. Plan of Jerablus, Area III, Levels 13/14.

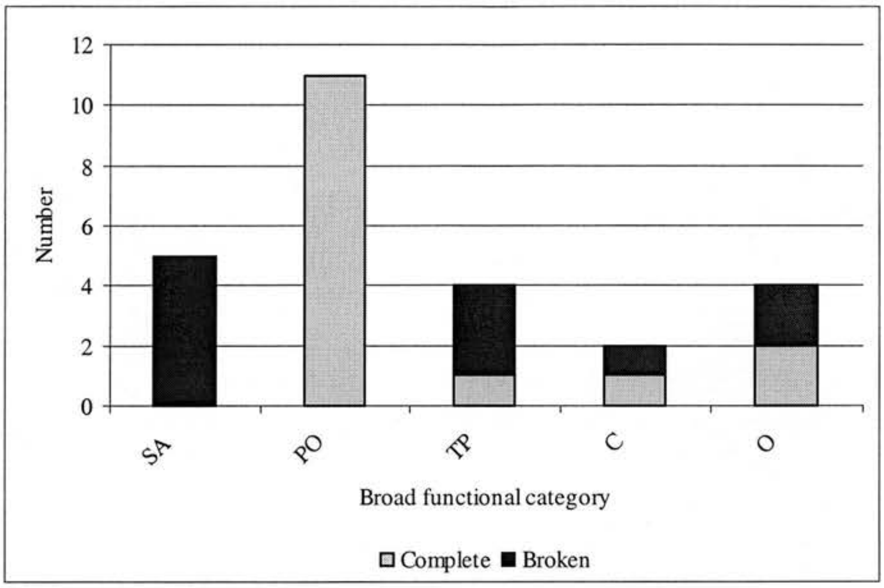

Figure 71. Occurrence of artefacts from Jerablus, Area III, Level 13/14, by broad functional category and condition.

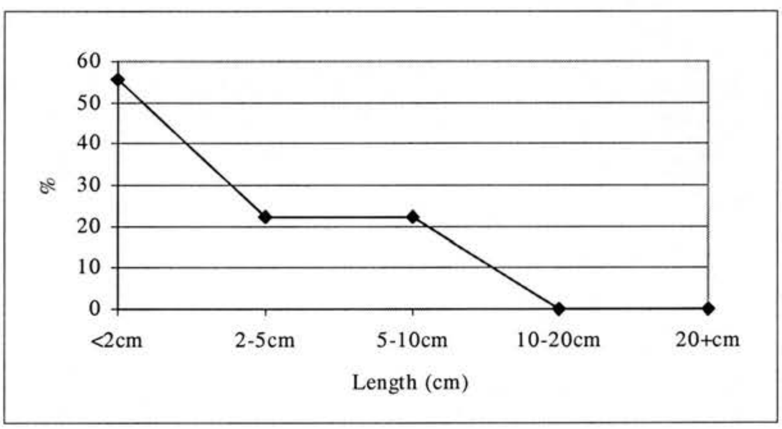

Figure 72. Occurrence of artefacts from Jerablus, Area III, Level 13/14, by longest dimension.

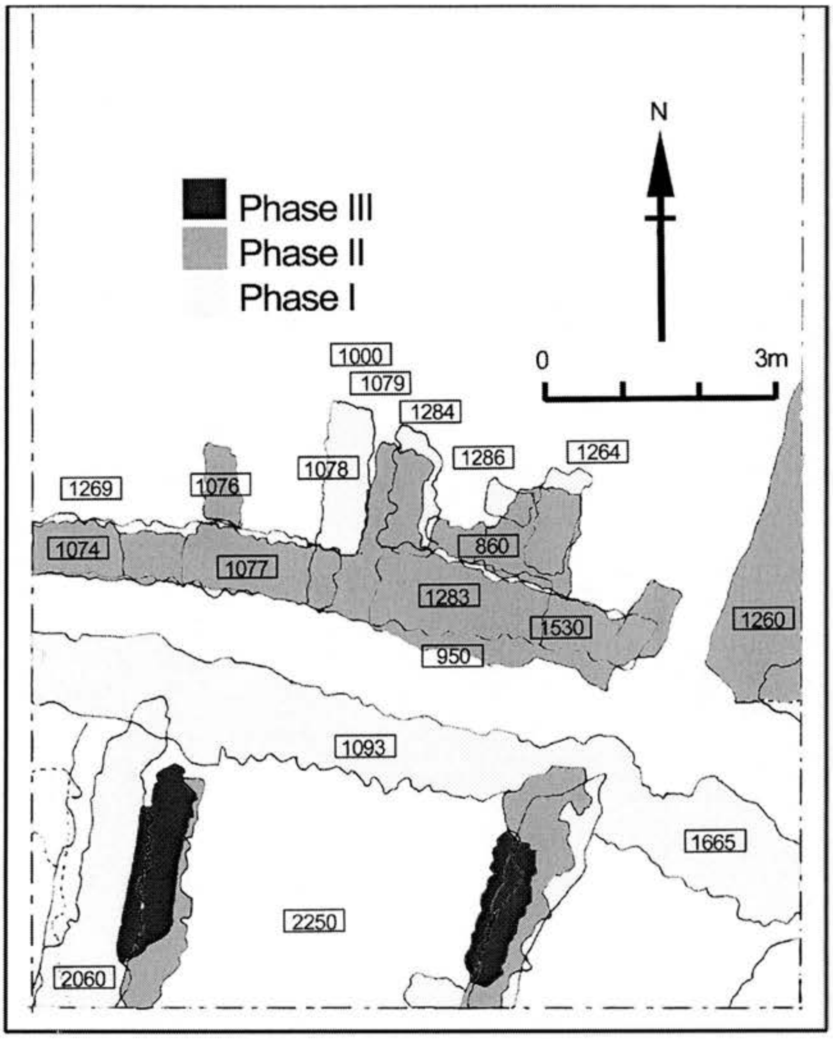

Figure 73. Plan of Jerablus, Area IV, Level 4 (phases 1-3).

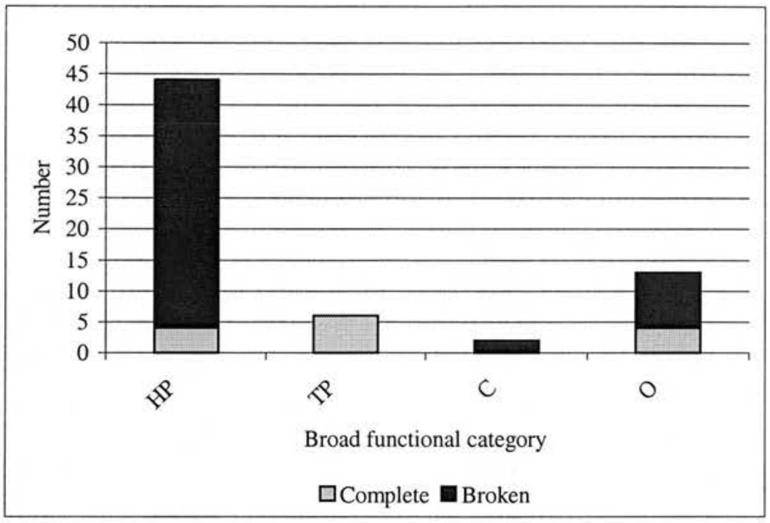

Figure 74. Occurrence of artefacts from Jerablus, Area IV, Level 4.1, by broad functional category and condition.

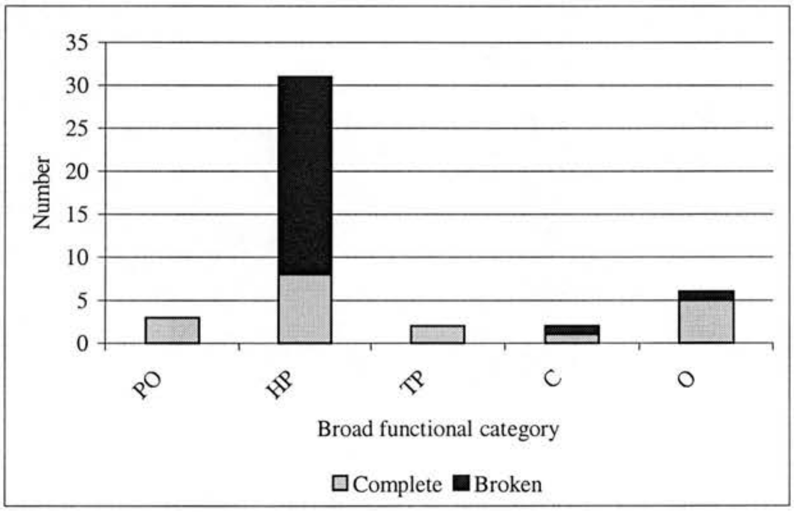

Figure 75. Occurrence of artefacts from Jerablus, Area IV, Level 4.2, by broad functional category and condition.

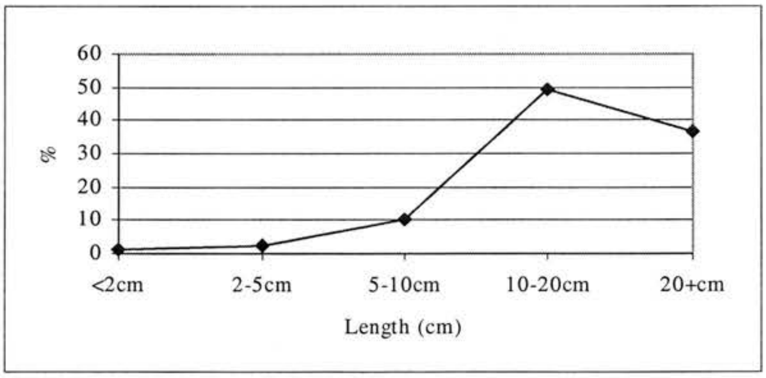

Figure 76. Occurrence of artefacts from Jerablus, Area IV, Level 4 (all phases), longest dimension.

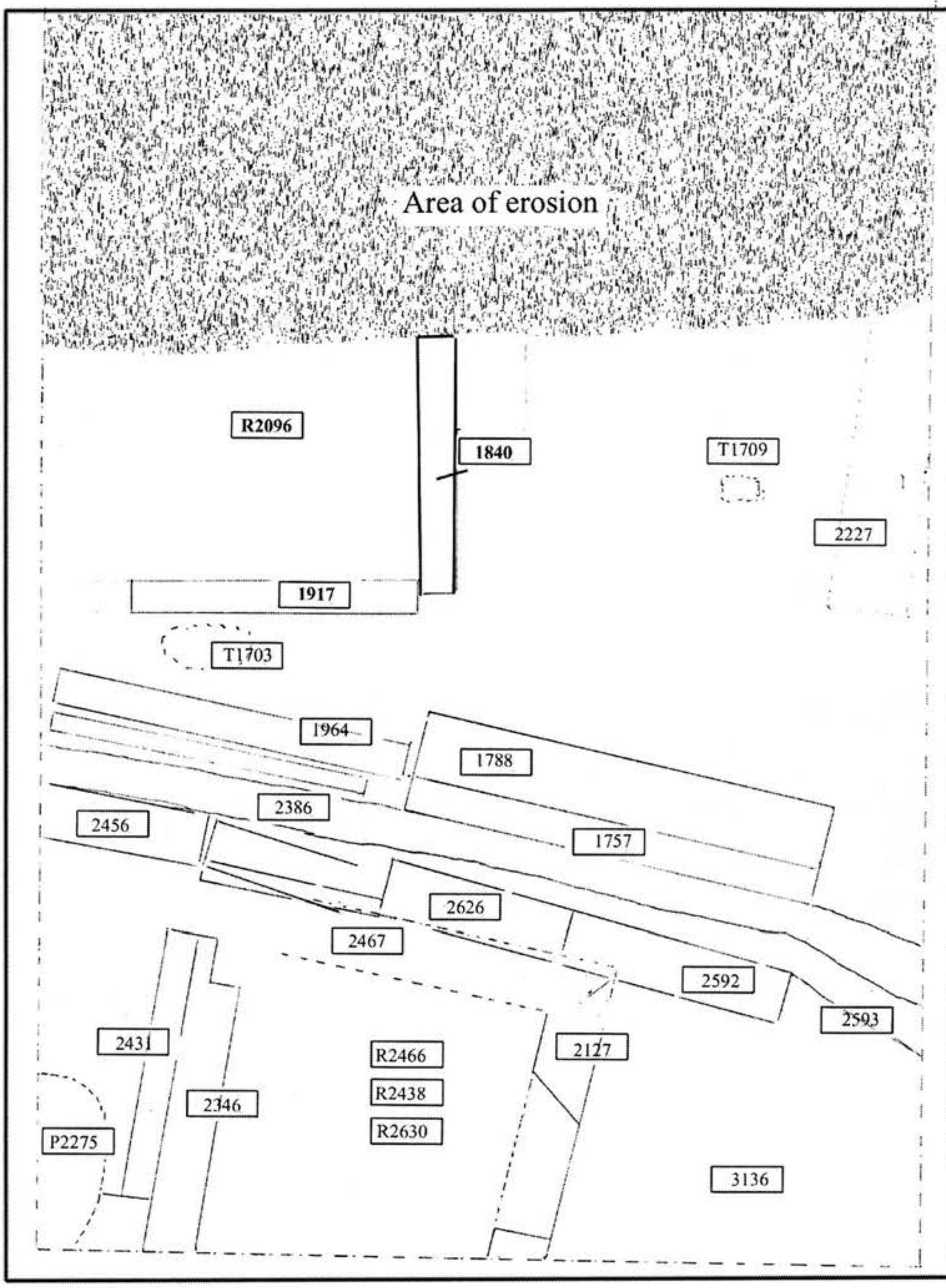

Figure 77. Plan of Jerablus SArea IV, Level 5, phases 1-3.

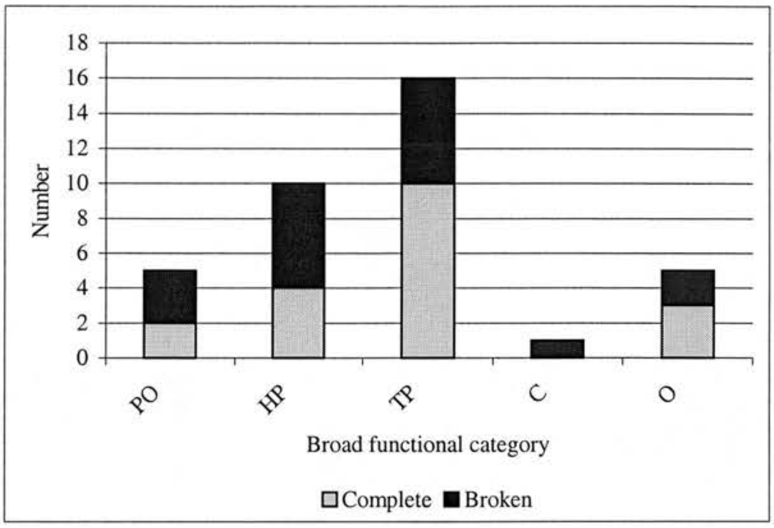

Figure 78. Occurrence of artefacts from Jerablus, Area IV, Level 5.1, by broad functional category and condition.

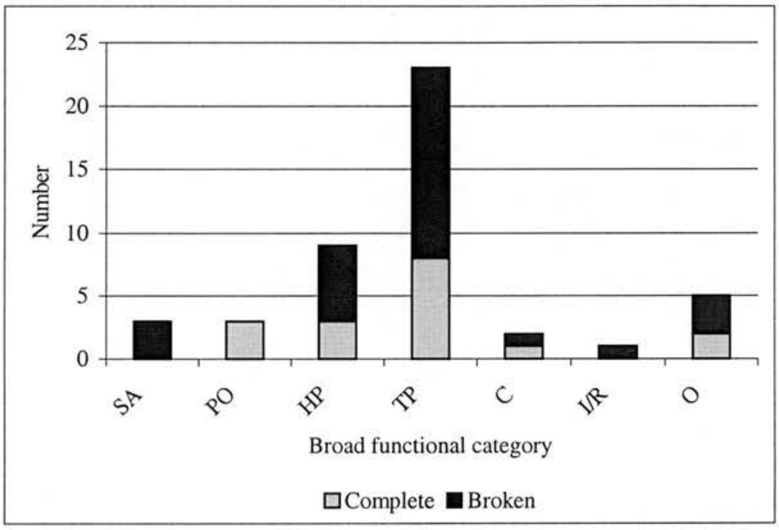

Figure 79. Occurrence of artefacts from Jerablus, Area IV, Level 5.2, by broad functional category and condition.

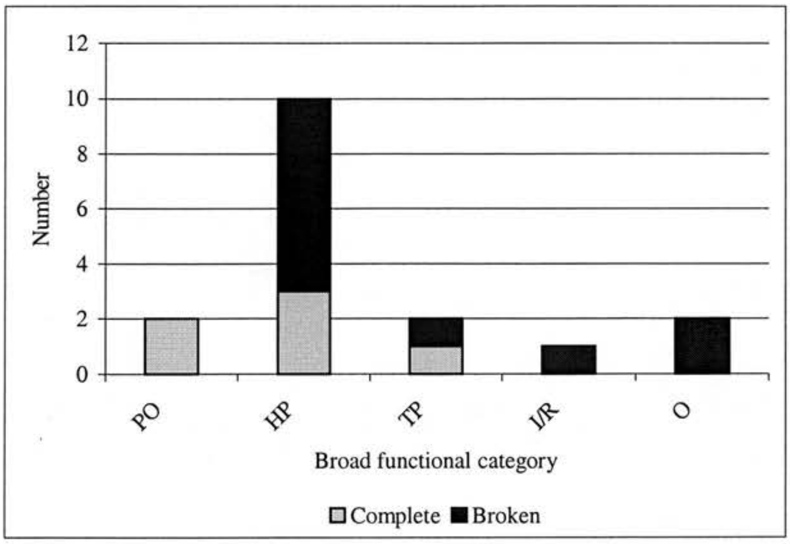

Figure 80. Occurrence of artefacts from Jerablus, Area IV, Level 5.3, by broad functional category and condition.

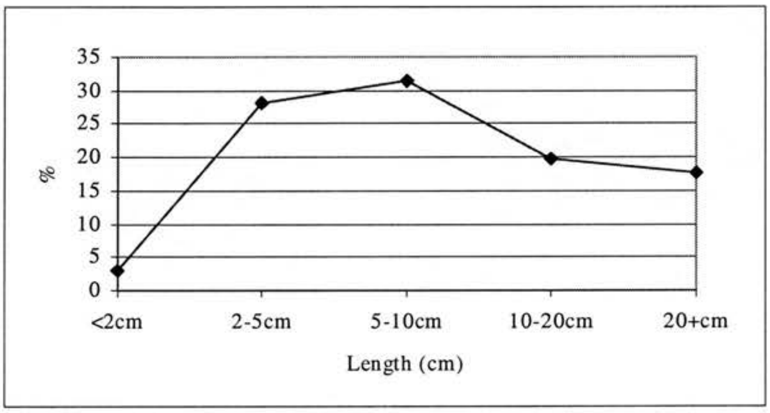

Figure 81. Occurrence of artefacts from Jerablus, Area IV, Level 5, by longest dimension.

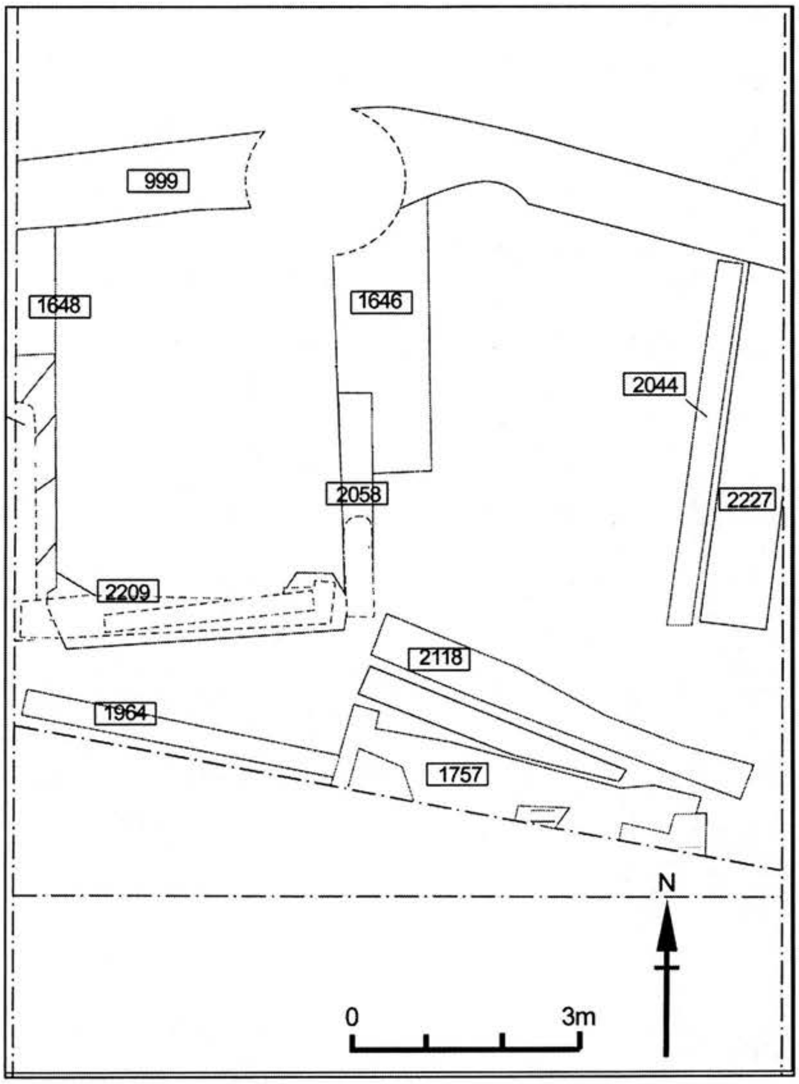

Figure 82. Plan of Jerablus, Area IV, Level 6.

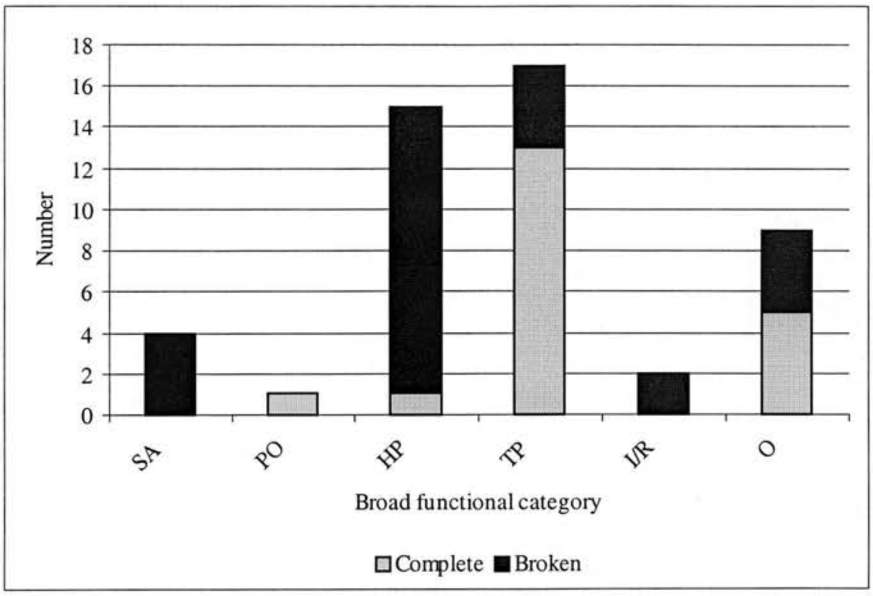

Figure 83. Occurrence of artefacts from Jerablus, Area IV, Level 6, by broad functional category and condition.

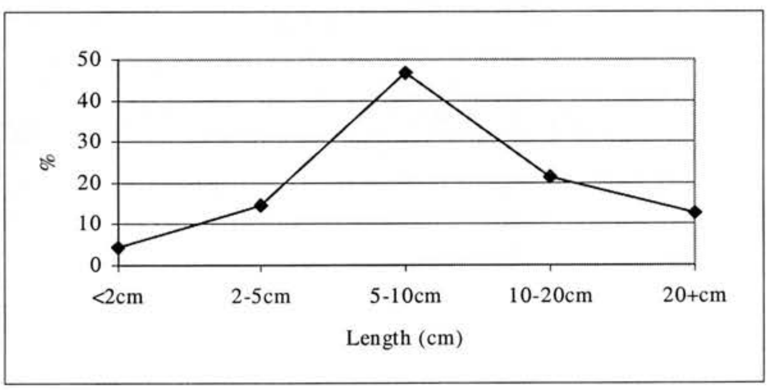

Figure 84. Occurrence of artefacts from Jerablus, Area IV, Level 6, longest dimension.

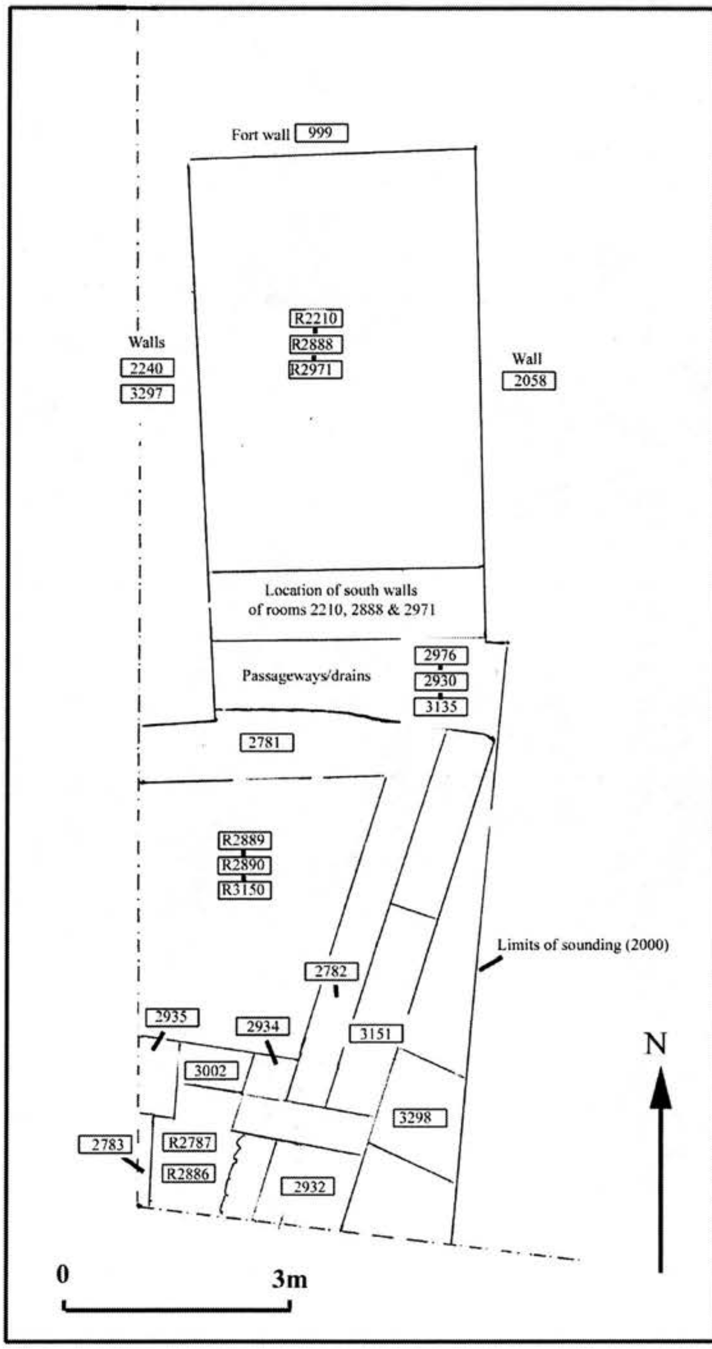

Figure 85. Plan of Jerablus, Area IV, Level 7, phases 1-3.

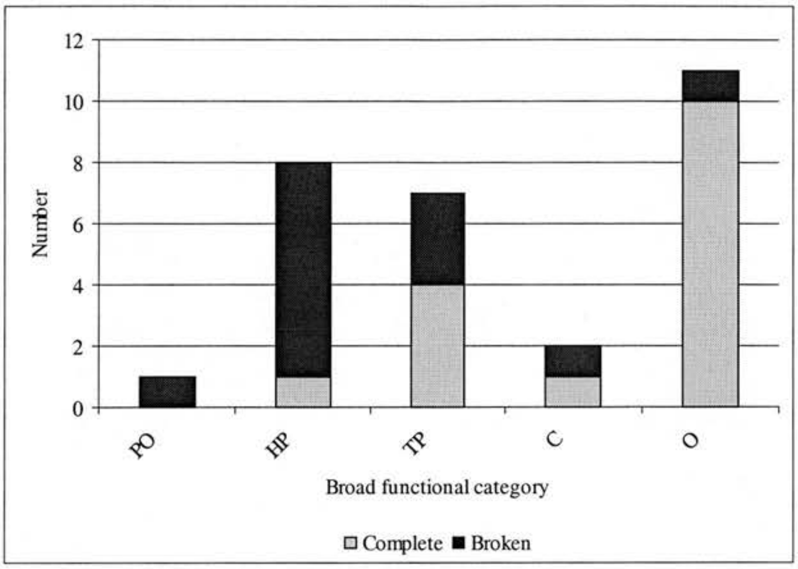

Figure 86. Occurrence of artefacts from Jerablus, Area IV, Level 7.1, by broad functional category and condition.

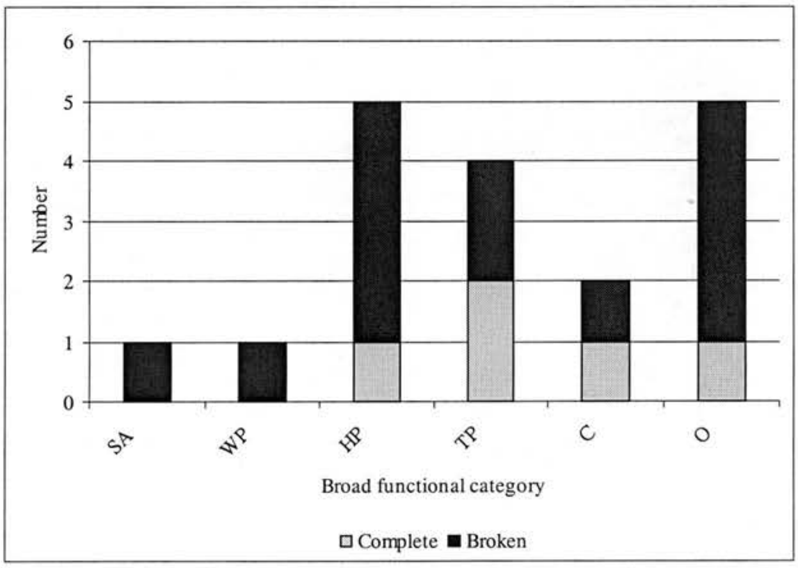

Figure 87. Occurrence of artefacts from Jerablus, Area IV, Level 7.2, by broad functional category and condition.

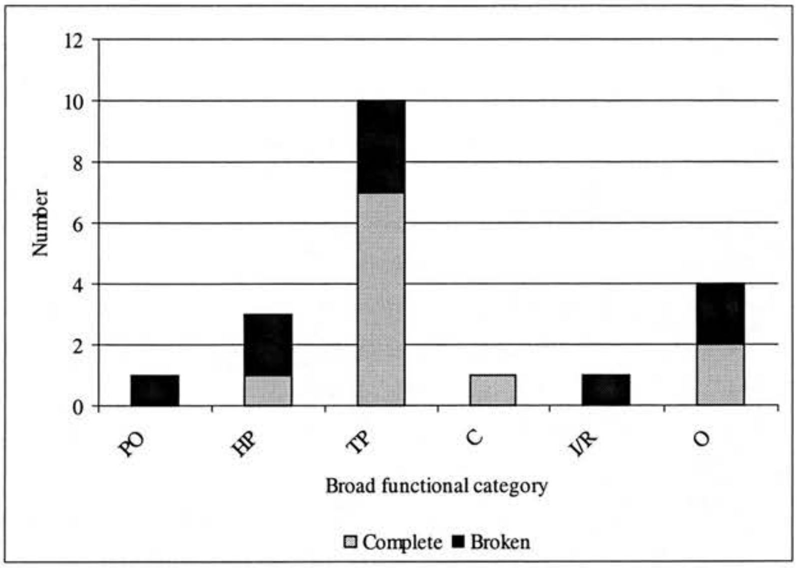

Figure 88. Occurrence of artefacts from Jerablus, Area IV, Level 7.3, by broad functional category and condition.

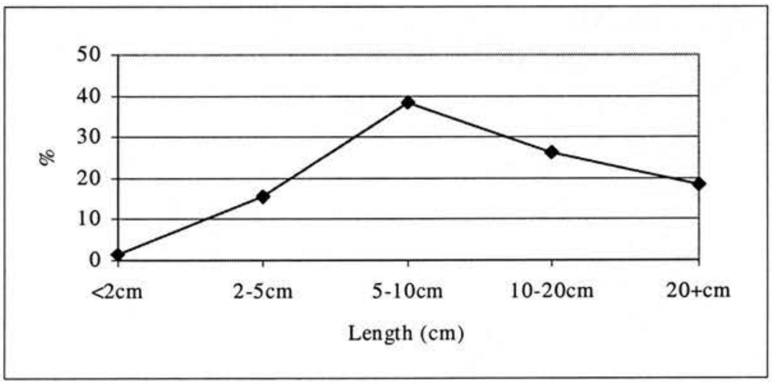

Figure 89. Occurrence of artefacts from Jerablus, Area IV, Level 7, by longest dimension.

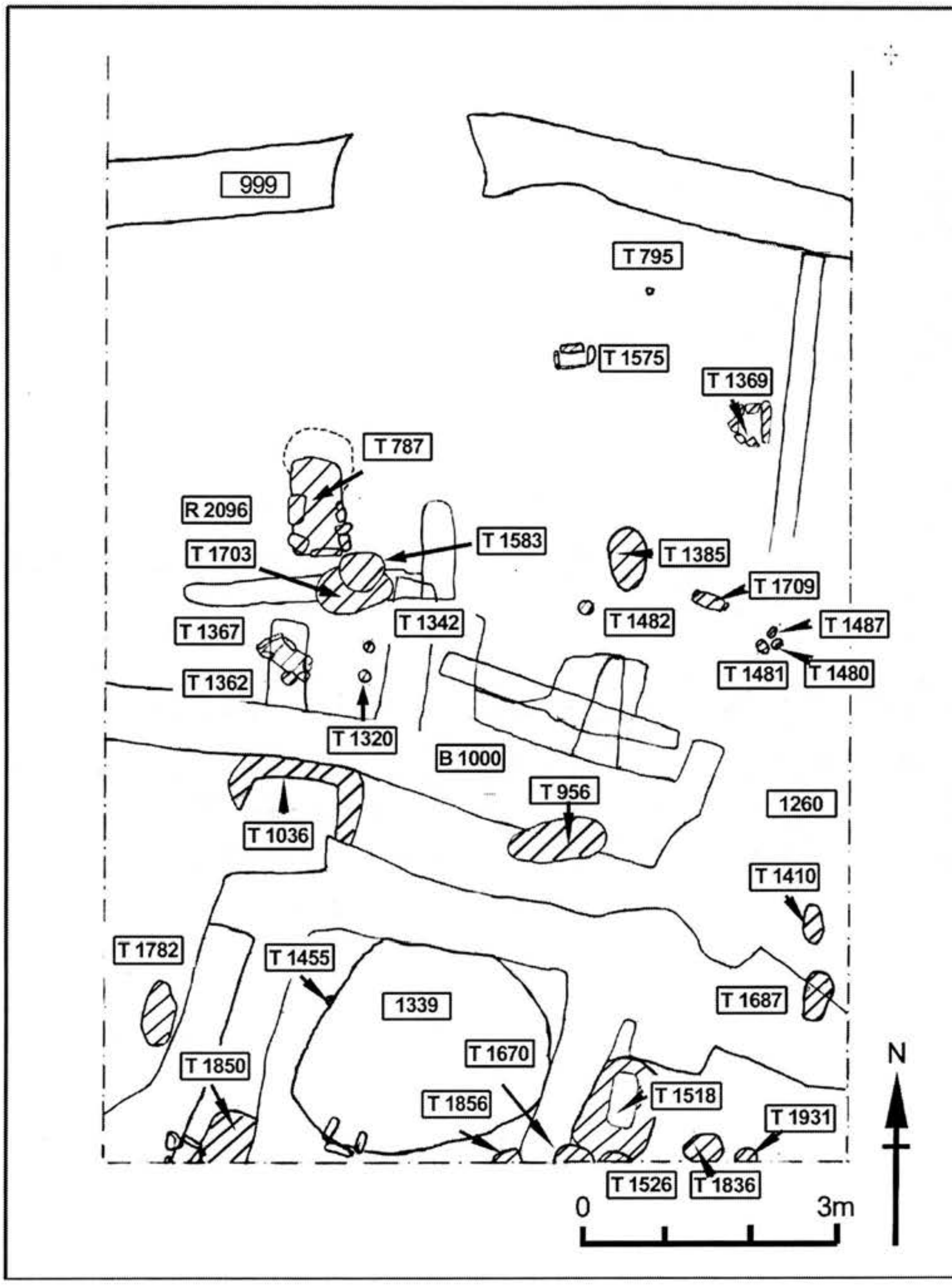

Figure 90. Plan showing the location of tombs in Jerablus, Area IV.

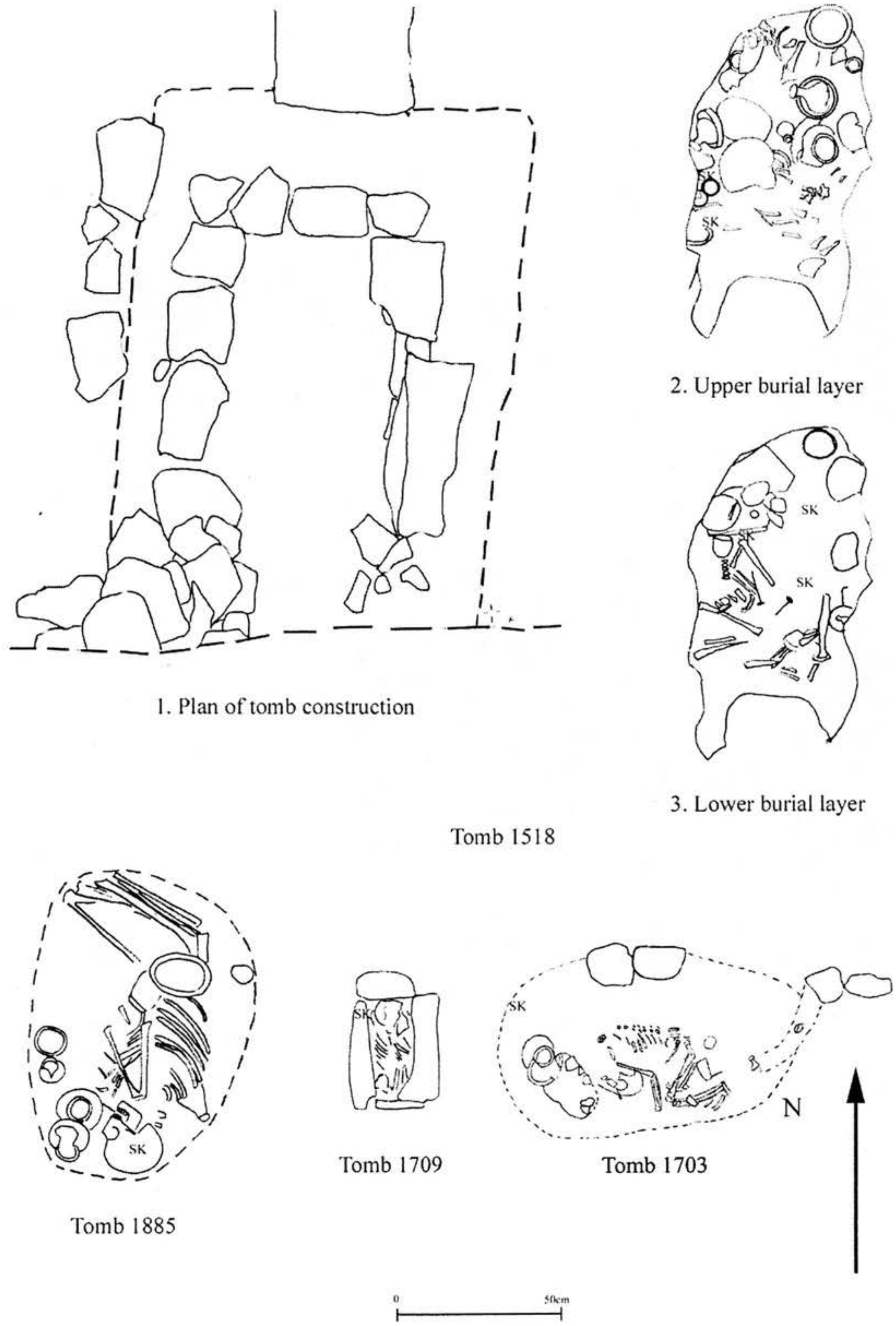

Figure 91. Examples of Early Bronze Age tombs excavated in Area IV at Jerablus.

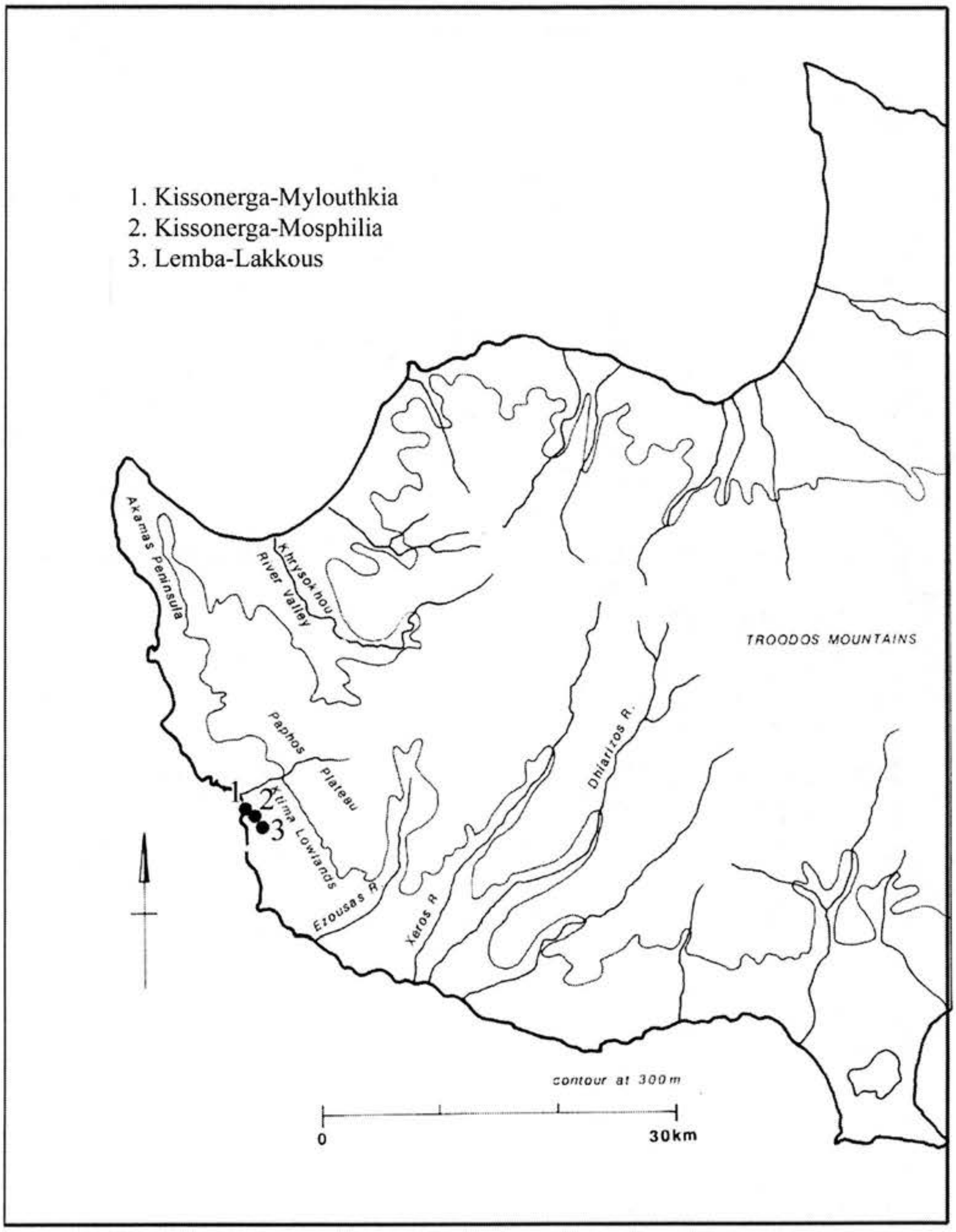

Figure 92. Map of western Cyprus showing the location of the Lemba Cluster sites, including Kissonerga-Mylouthkia (after Bolger 1989: fig. 18.1).

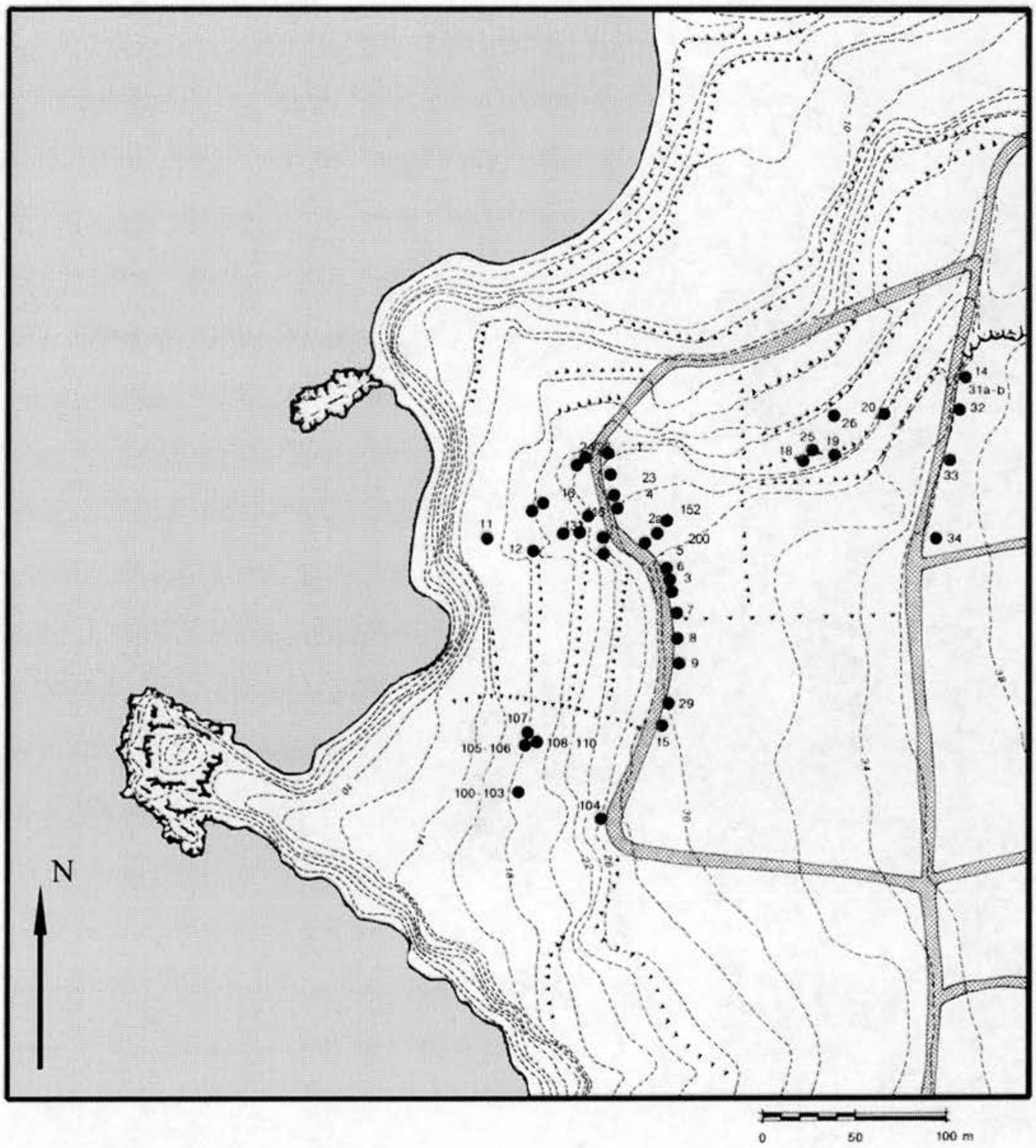

Figure 93. Kissonerga-Mylouthkia site plan (after Peltenburg et al. forthcoming: fig. 27)

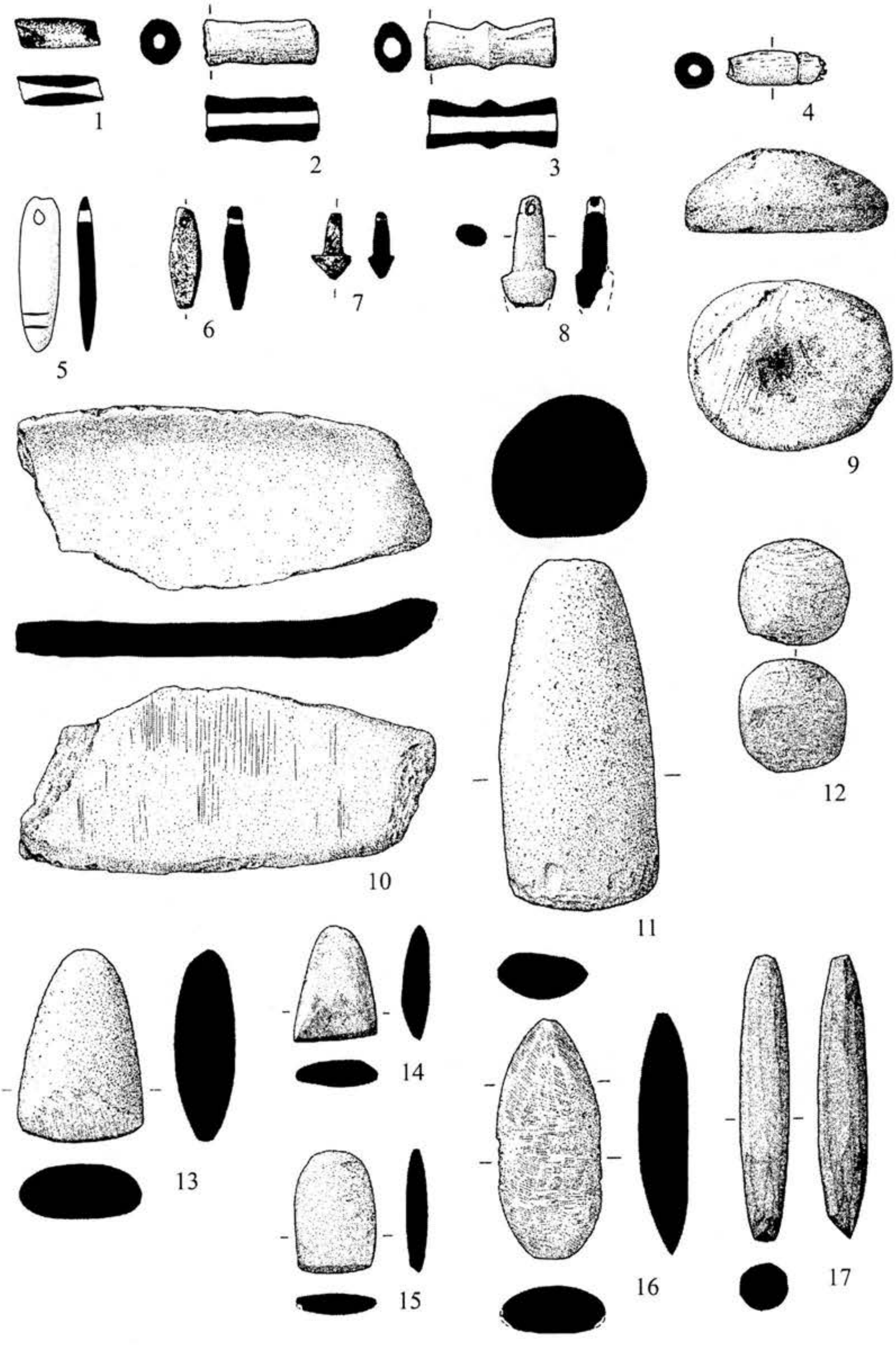

Figure 94. Artefacts from Mylouthkia associated with the broad functional categories of personal ornament (1-8), heavy processing (9-12) and cutting tools (13-17). Scale 1:1 (1-4); 1:2 (5-8, 17); 1:3 (9, 11-16); 1:6 (10). (drawings by Sylvia Stevenson)

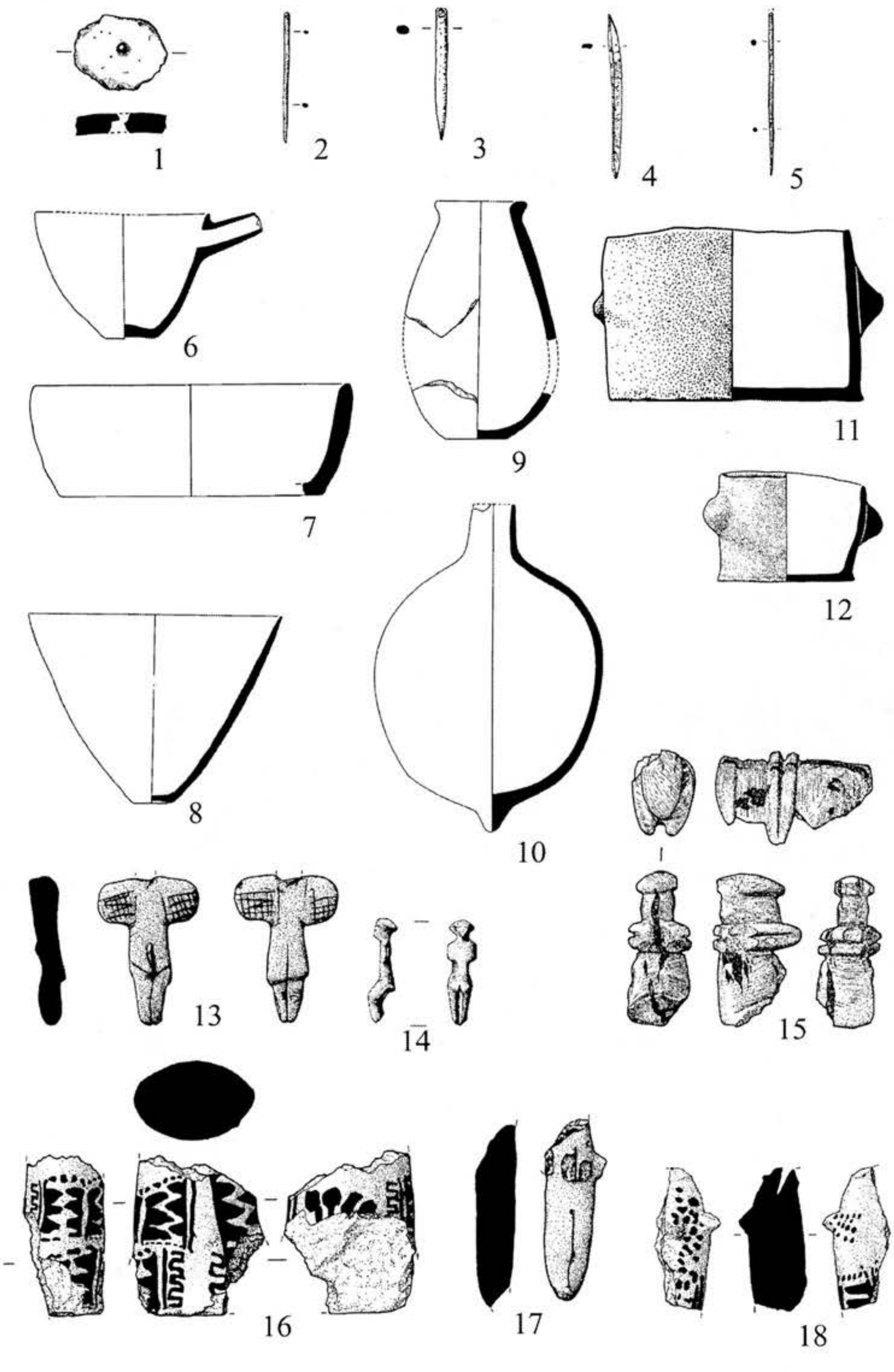

Figure 95. Artefacts from Mylouthkia associated with the broad functional categories of textile production (1-5), containing (6-12) and ideology/ritual (13-18). Scale 1:2 (1-5, 13-17); 1:12 (6-12). (drawings by Sylvia Stevenson)

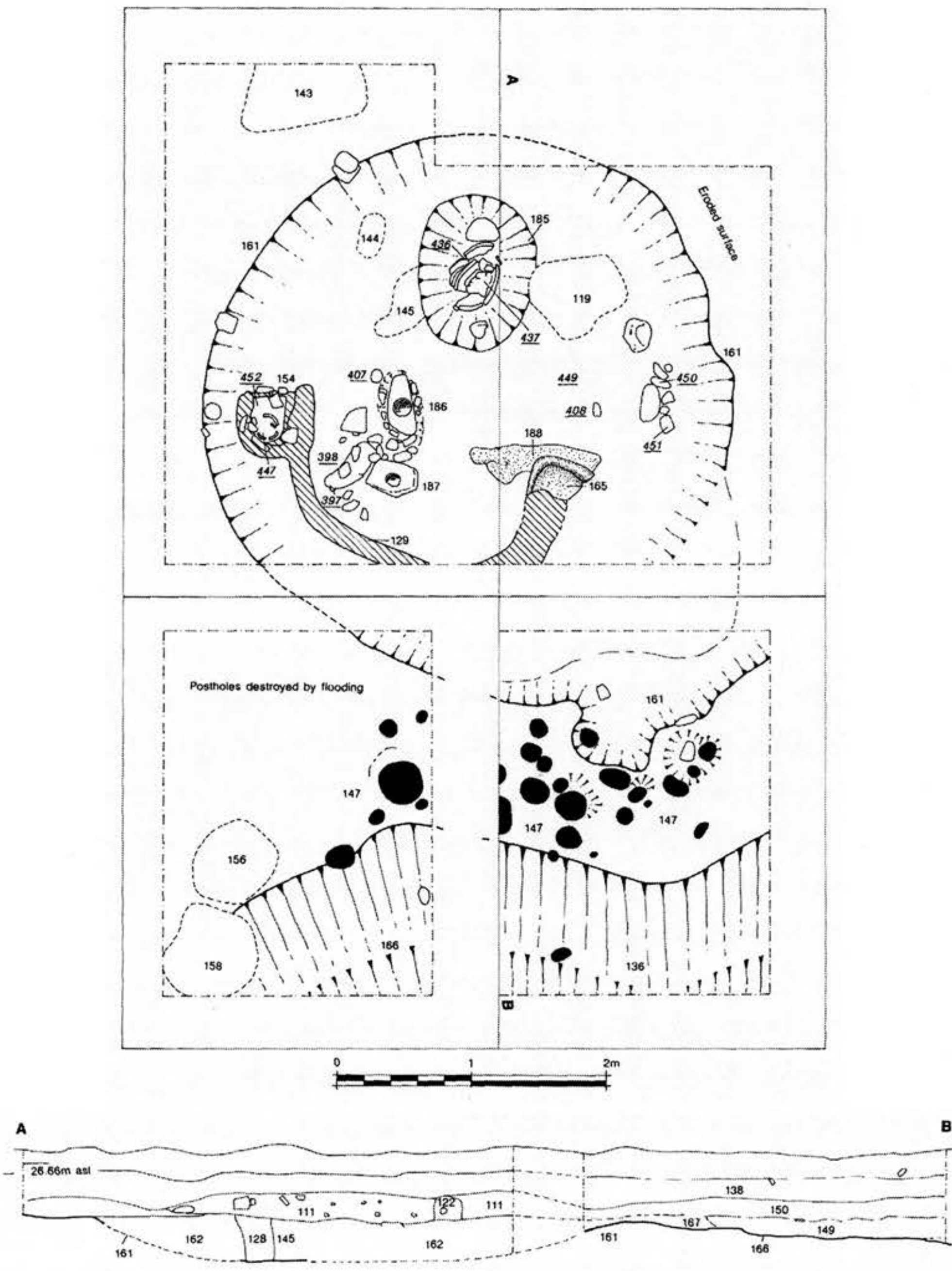

Figure 96. Plan and section of Mylouthkia, Building 152. (Peltenburg et al. forthcoming: fig. 38)

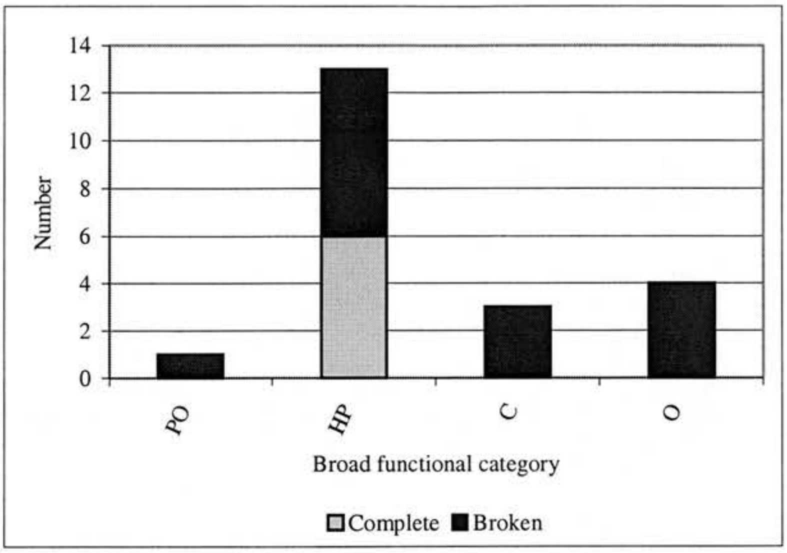

Figure 97. Occurrence of artefacts from Mylouthkia, Building 152, by broad functional category and condition.

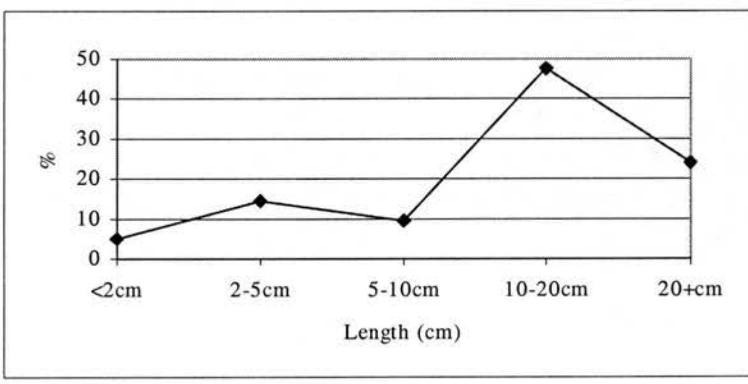

Figure 98. Occurrence of artefacts from Mylouthkia, Building 152, by longest dimension.

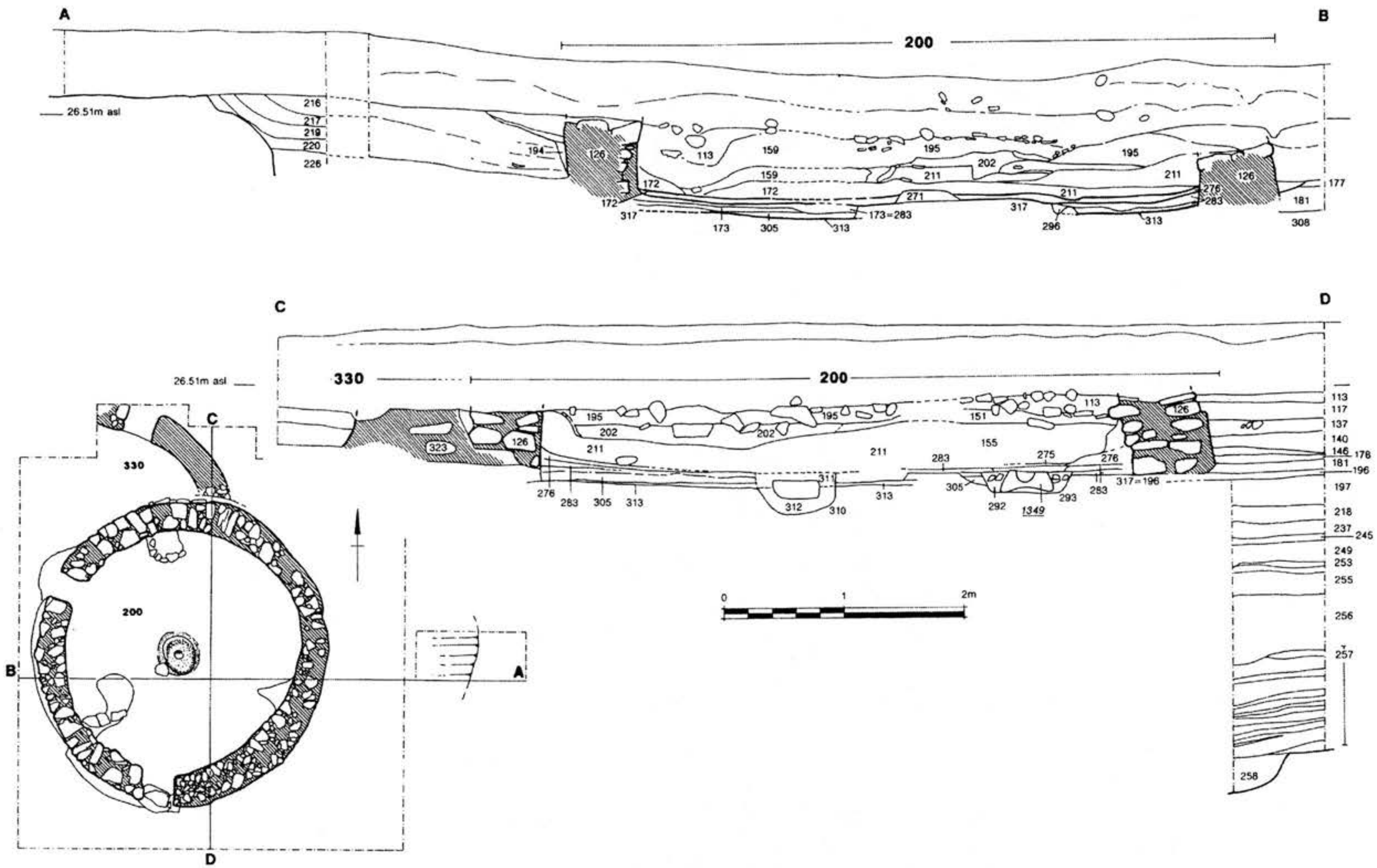

Figure 99. Plan and section of Mylouthkia, Building 200. (Peltenburg et al. forthcoming: fig 42)

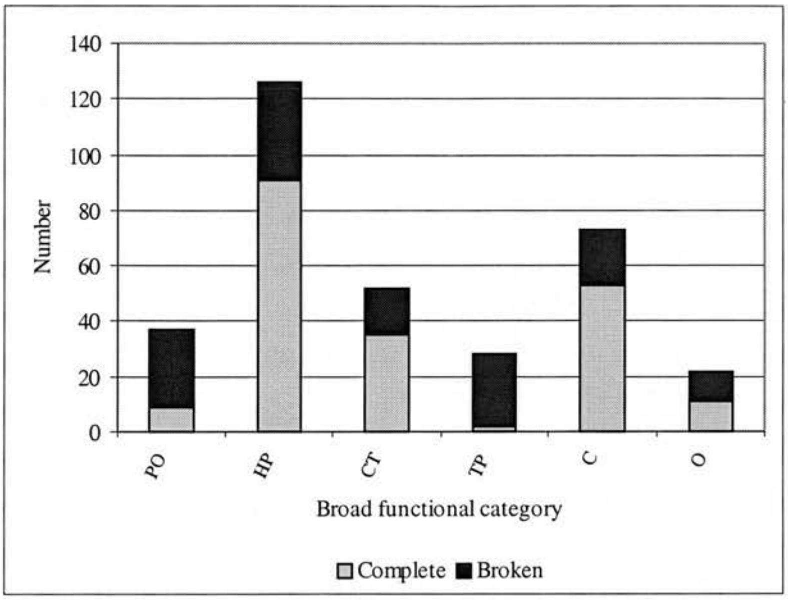

Figure 100. Occurrence of artefacts from Mylouthkia, Building 200 (all phases), by broad functional category and condition.

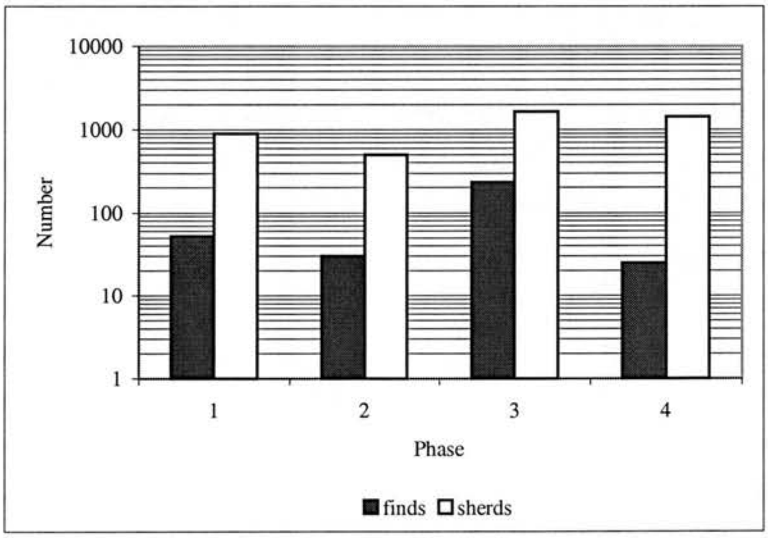

Figure 101. Occurrence of registered small finds and sherds from Mylouthkia, Building 200, phases 1-4.

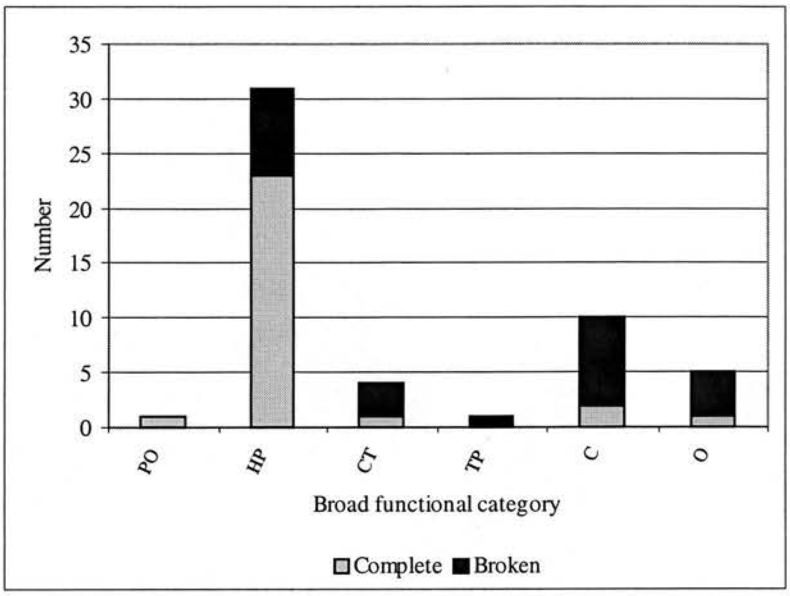

Figure 102. Occurrence of artefacts from Mylouthkia, Building 200, phase 1, by broad functional category and condition.

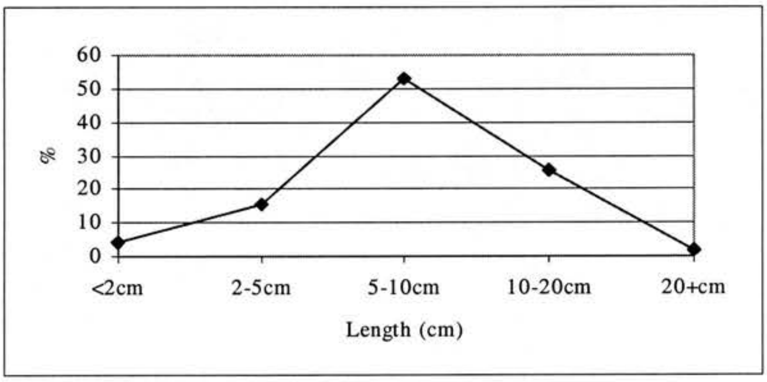

Figure 103. Occurrence of artefacts from Mylouthkia, Building 200, phase 1, by longest dimension.

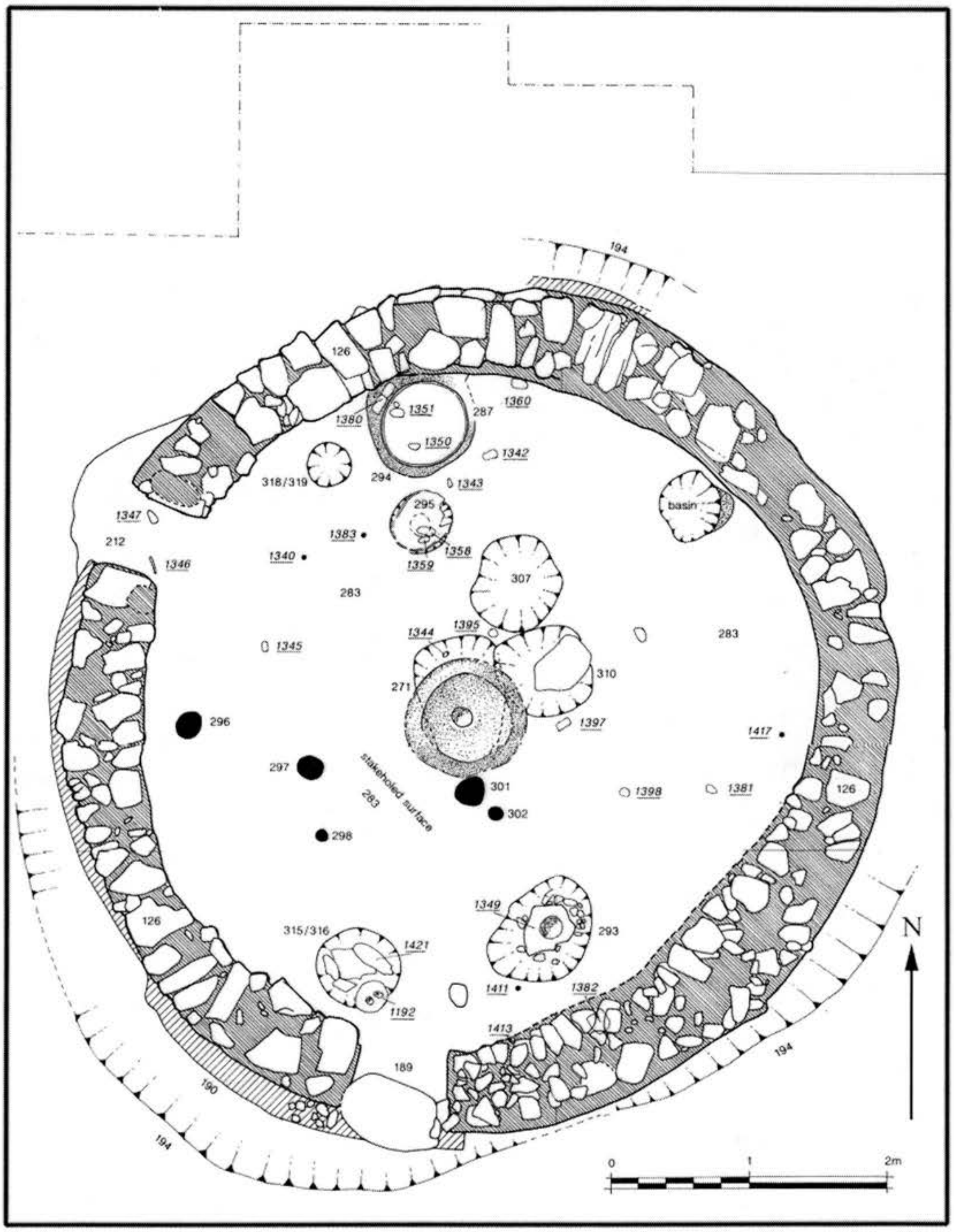

Figure 104. Plan of Mylouthkia, Building 200, phase 2. (Peltenburg et al. forthcoming: fig. 40)

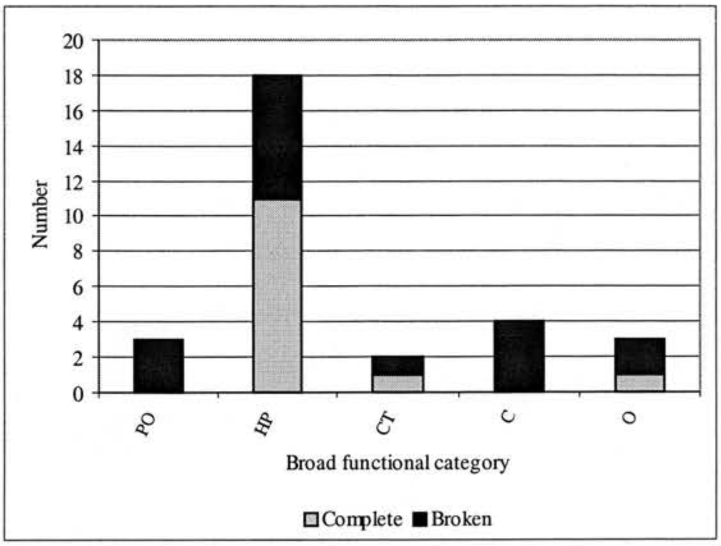

Figure 105. Occurrence of artefacts from Mylouthkia, Building 200, phase 2, by broad functional category and condition.

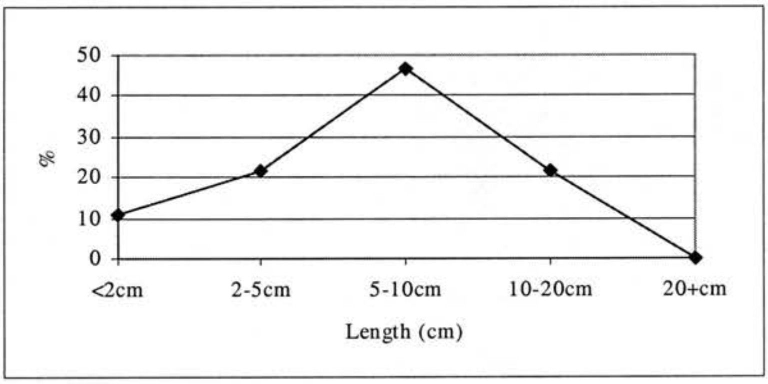

Figure 106. Occurrence of artefacts from Mylouthkia, Building 200, phase 2, by longest dimension.

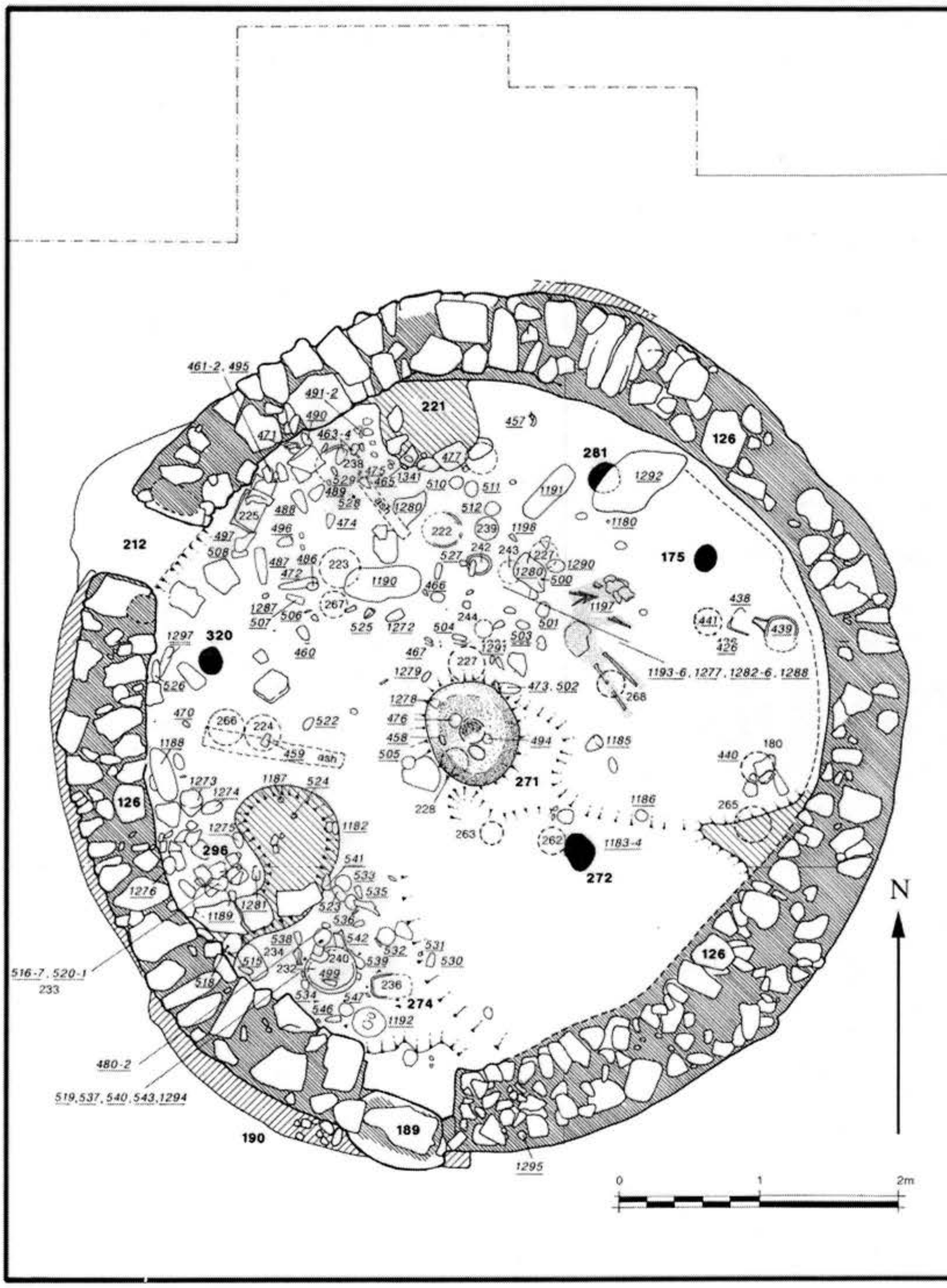

Figure 107. Plan of Mylouthkia, Building 200, phase 3. (Peltenburg et al. forthcoming: fig. 41)

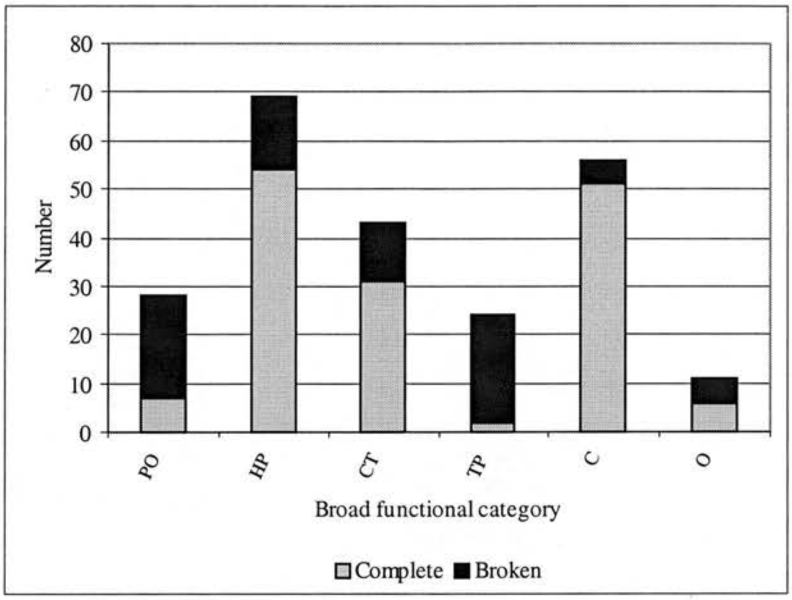

Figure 108. Occurrence of artefacts from Mylouthkia, Building 200, phase 3, by broad functional category and condition.

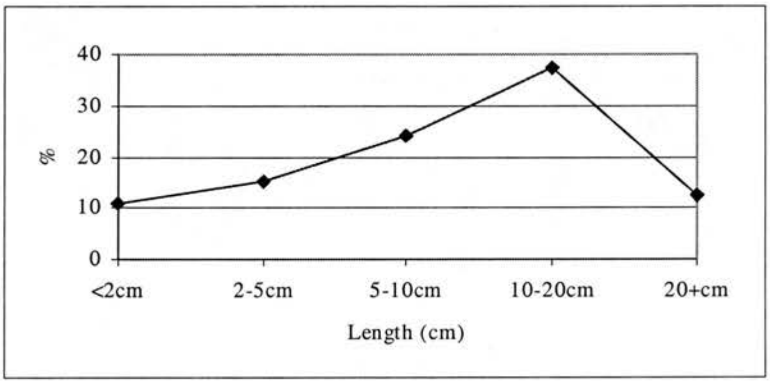

Figure 109. Occurrence of artefacts from Building 200, phase 3, by longest dimension.

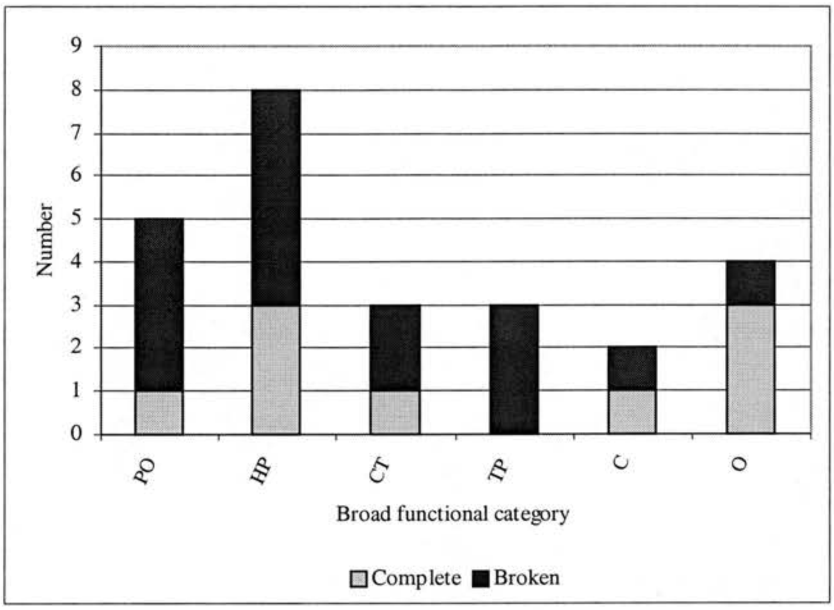

Figure 110. Occurrence of artefacts from Mylouthkia, Building 200, phase 4, by broad functional category and condition.

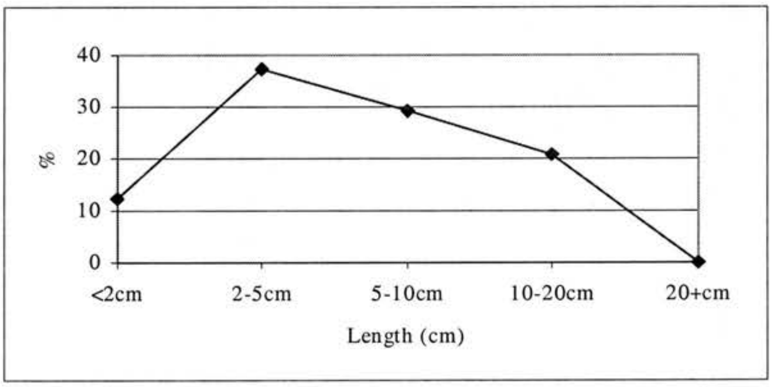

Figure 111. Occurrence of artefacts from Mylouthkia, Building 200, phase 4, by longest dimension.

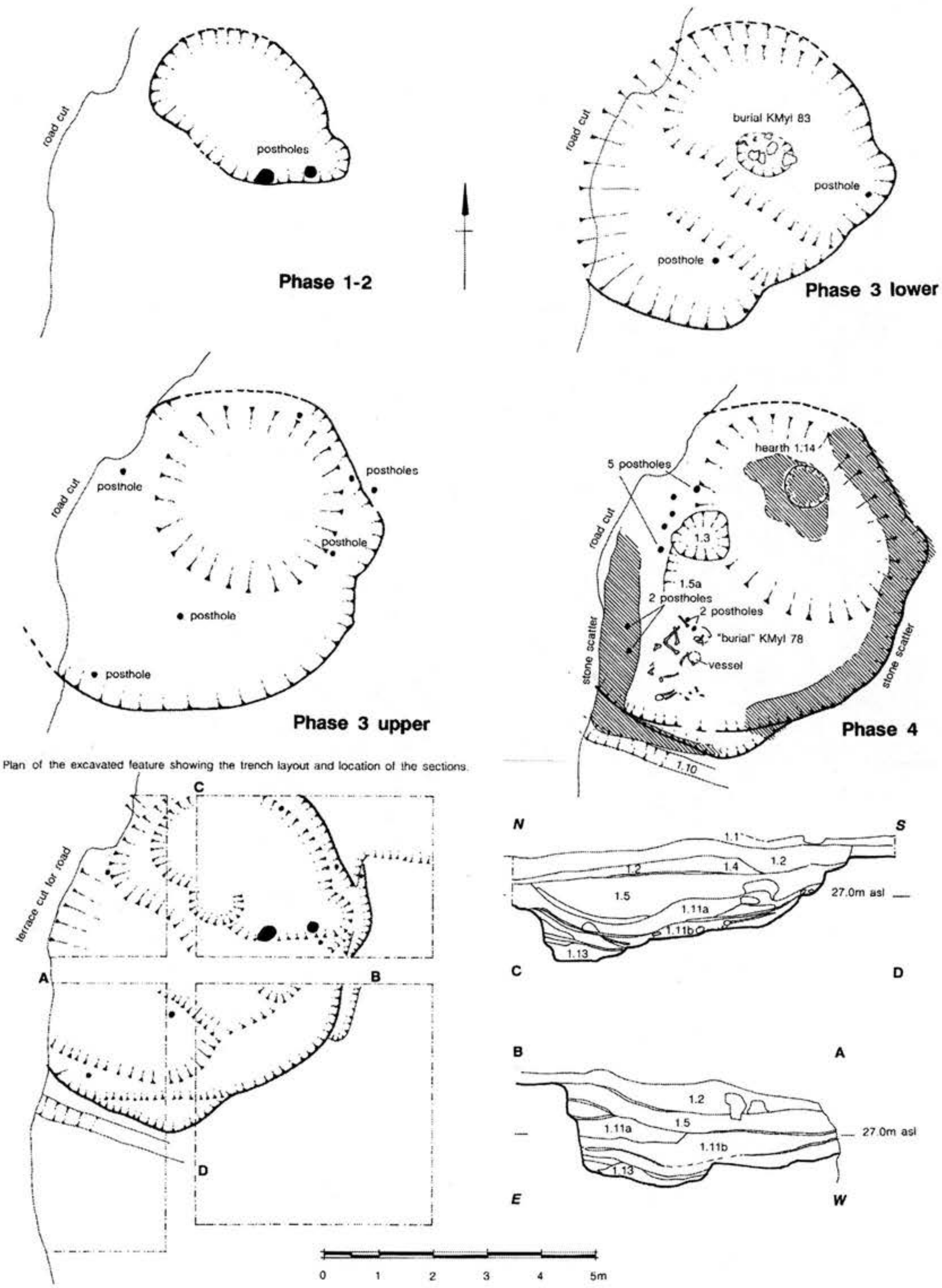

Figure 112. Plans of Mylouthkia, Pit 1, phase 1-4. (Peltenburg et al. forthcoming: fig. 31)

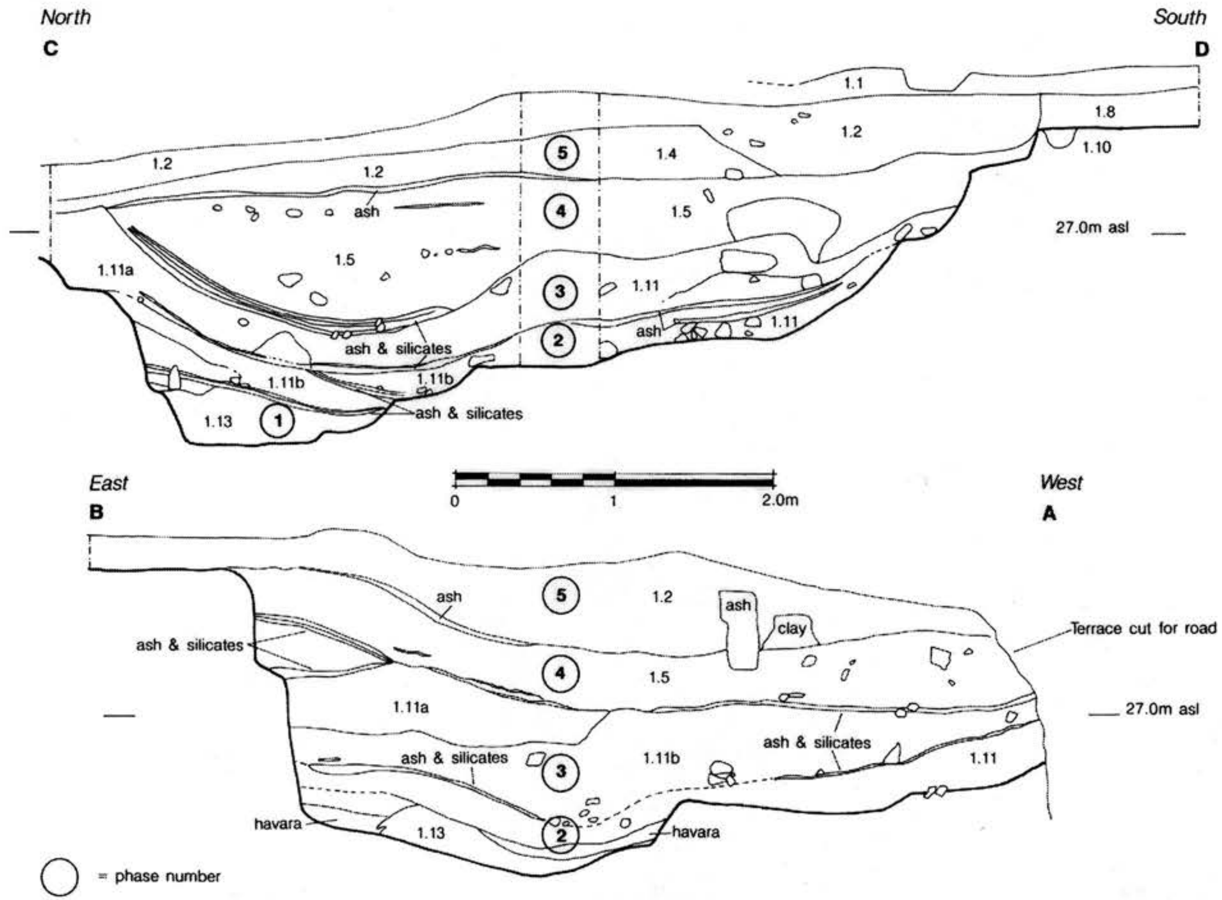

Figure 113. Mylouthkia, Pit 1 sections showing main depositional phases. (Peltenburg et al. forthcoming: fig. 32)

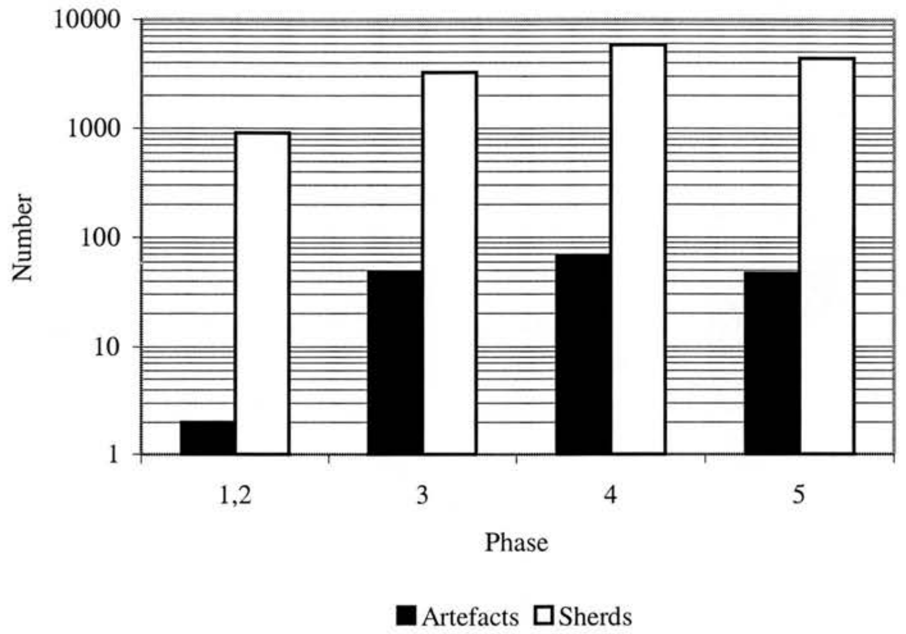

Figure 114. Occurrence of registered small finds and sherds from Mylouthkia, Pit 1, phases 1-5.

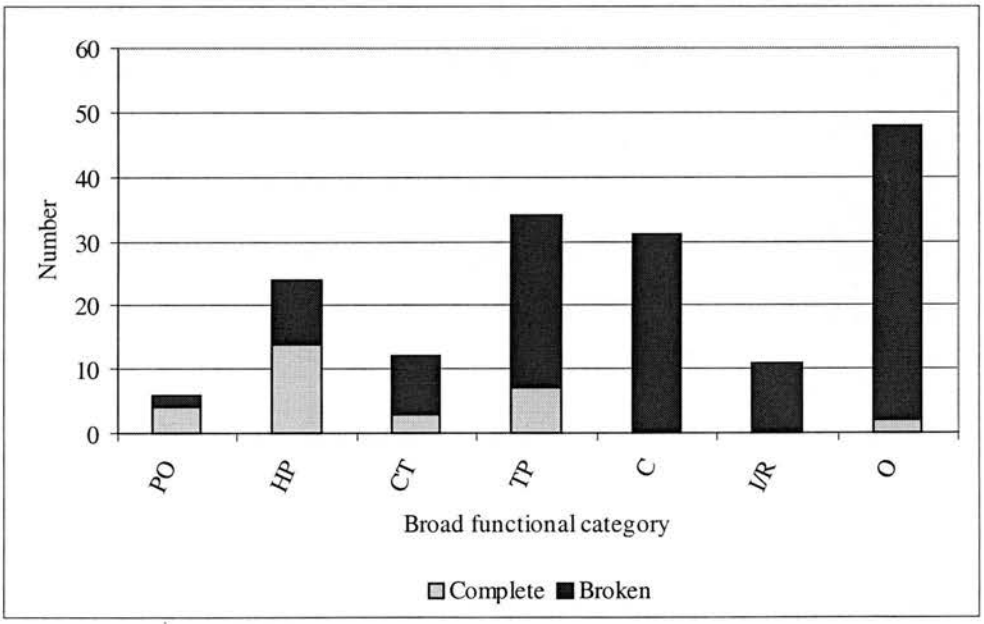

Figure 115. Occurrence of artefacts from Mylouthkia, Pit 1 (all phases), by broad functional category and condition.

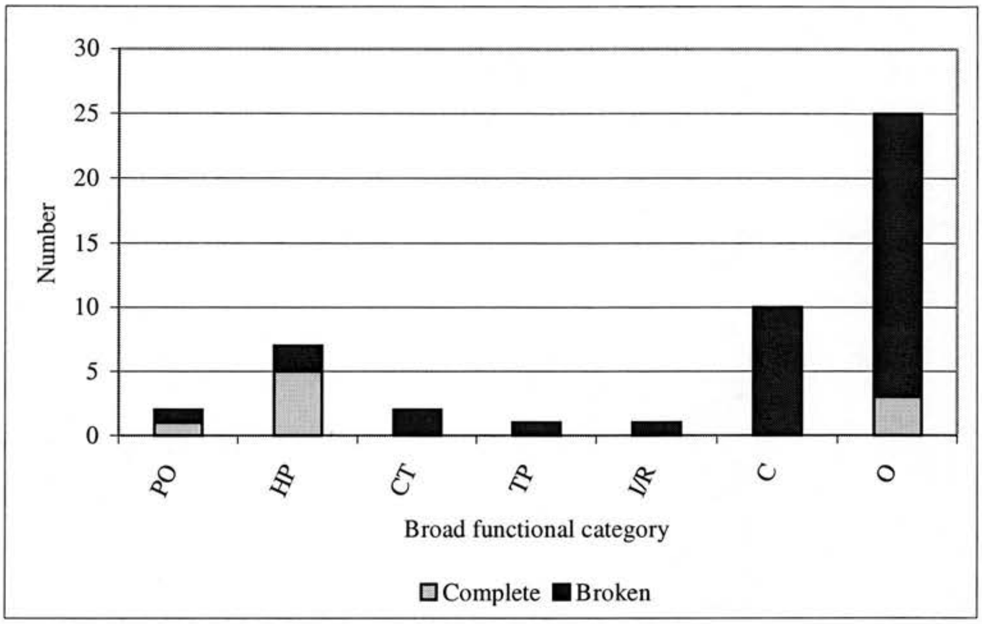

Figure 116. Occurrence of artefacts from Mylouthkia, Pit 1, Phase 3, by broad functional category and condition.

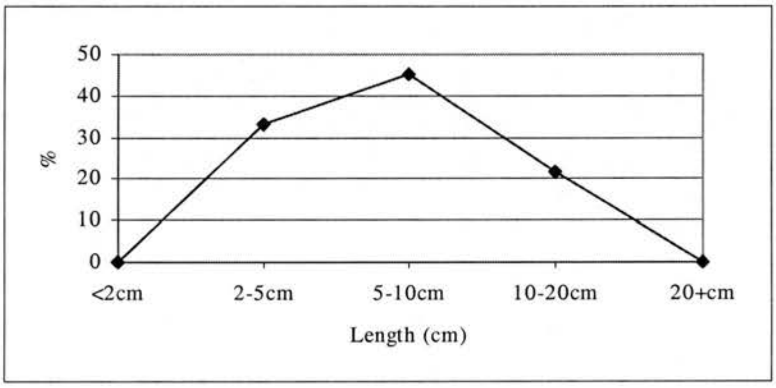

Figure 117. Occurrence of artefacts from Mylouthkia, Pit 1, Phase 3, by longest dimension.

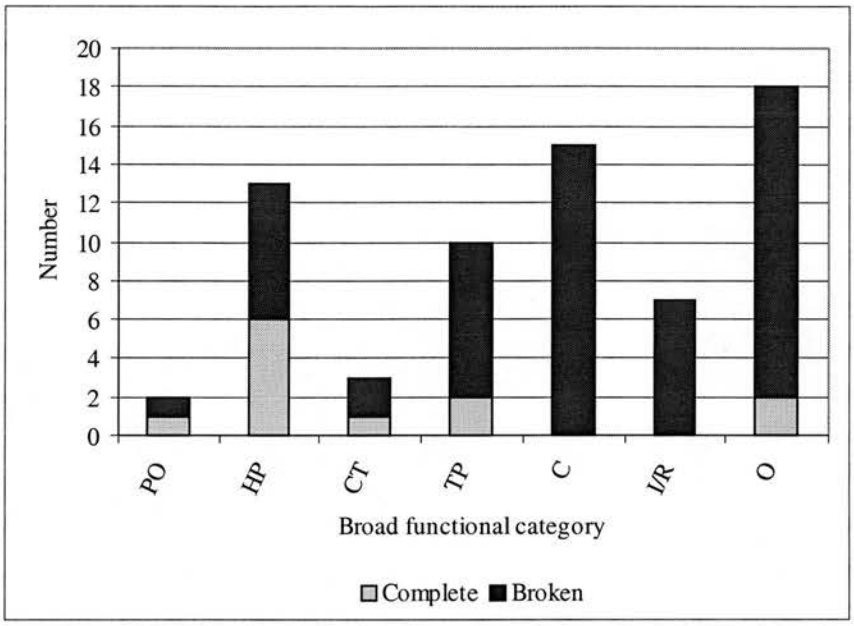

Figure 118. Occurrence of artefacts from Mylouthkia, Pit 1, Phase 4, by broad functional category and condition.

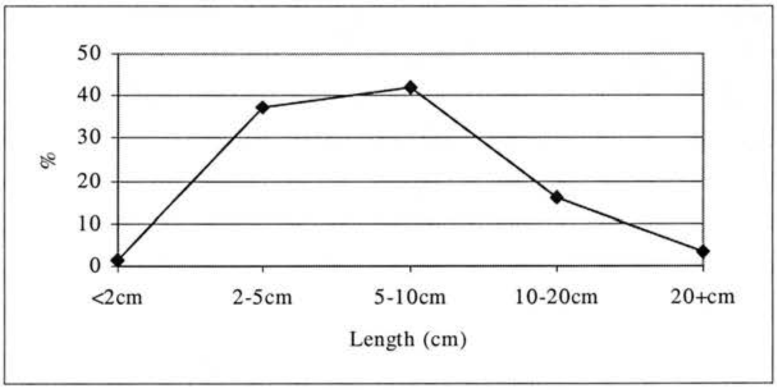

Figure 119. Occurrence of artefacts from Mylouthkia, Pit 1, Phase 4, by longest dimension.

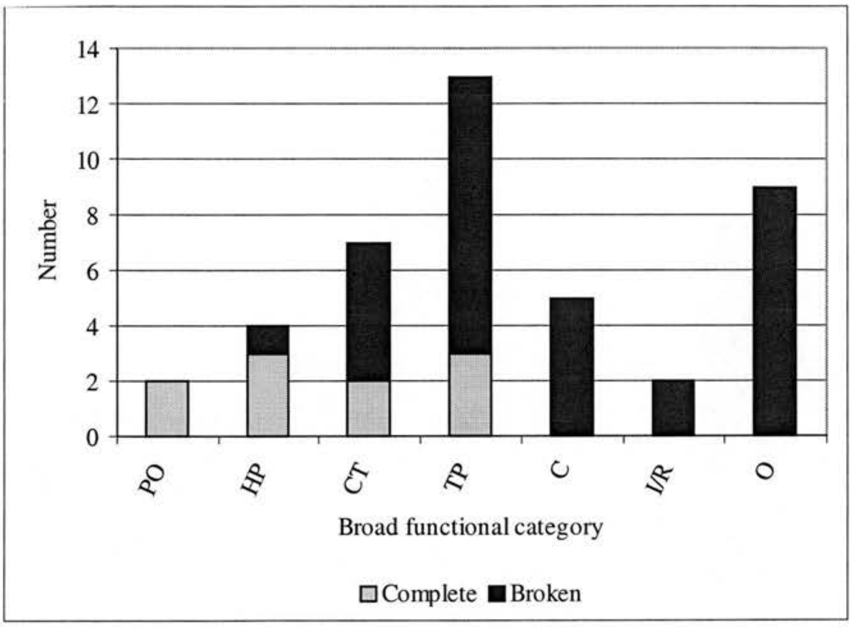

Figure 120. Occurrence of artefacts from Mylouthkia, Pit 1, Phase 5, by broad functional category and condition.

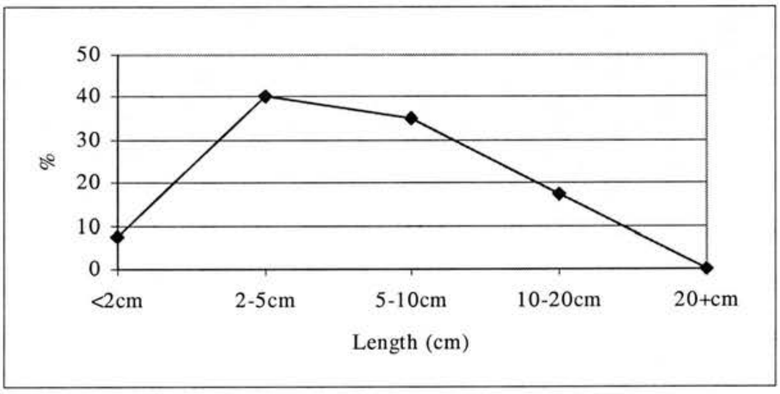

Figure 121. Occurrence of artefacts from Mylouthkia, Pit 1, Phase 5, by longest dimension.

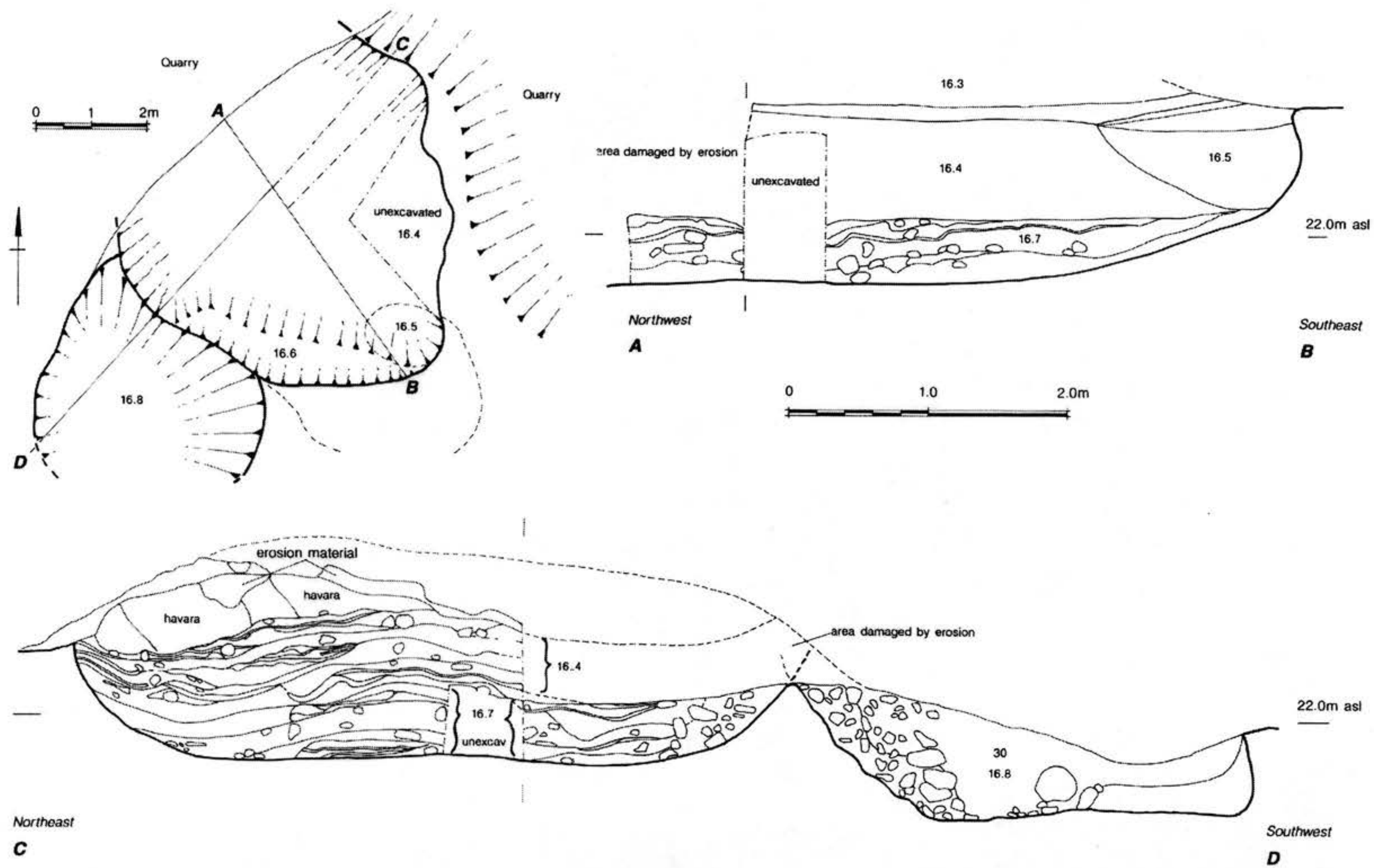

Figure 122. Plans and sections Mylouthkia, Pit 16. (Peltenburg et al. forthcoming: fig. 34)

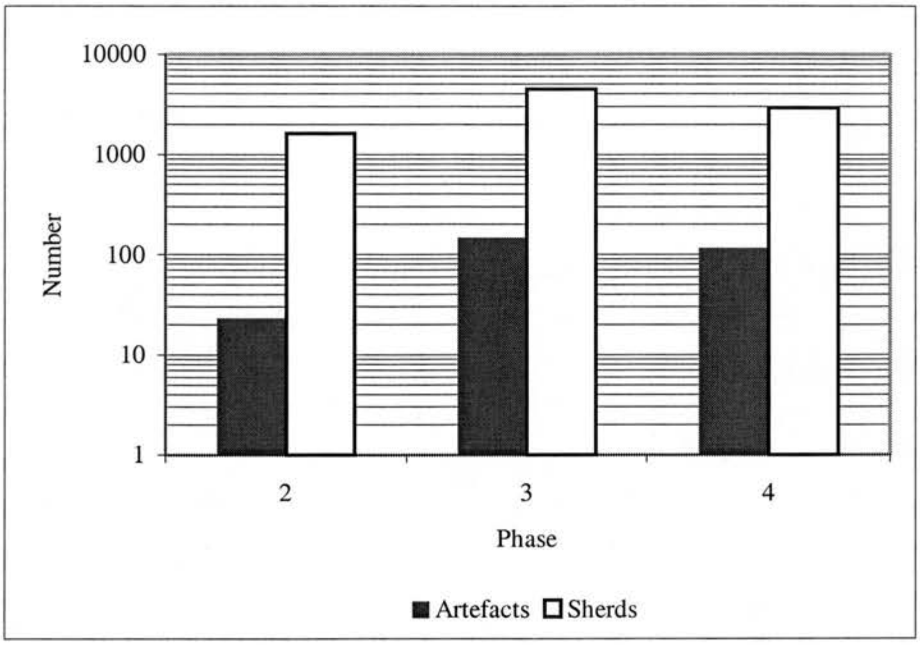

Figure 123. Occurrence of registered small finds and sherds from Mylouthkia, Pit 16, Phases 2-4.

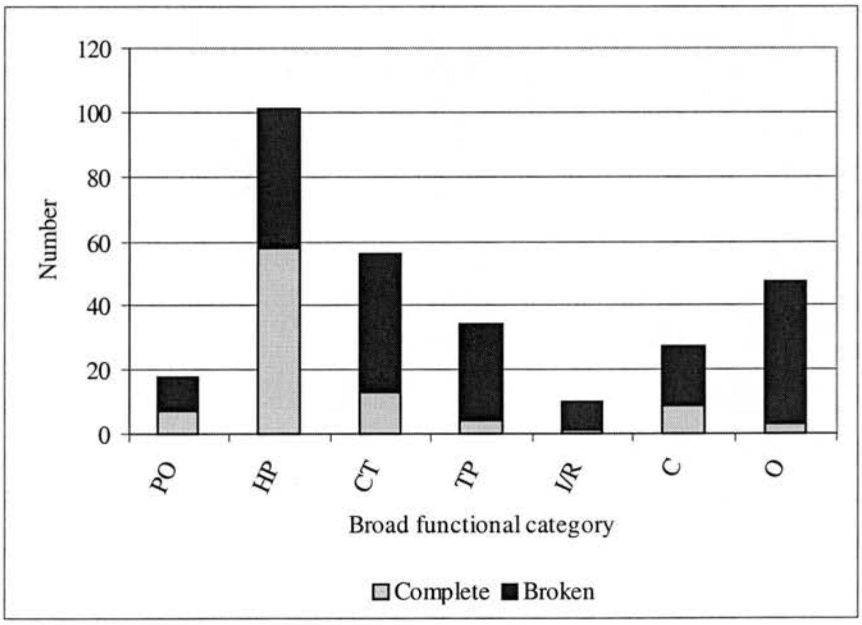

Figure 124. Occurrence of artefacts from Mylouthkia, Pit 16 (all phases), by broad functional category and condition.

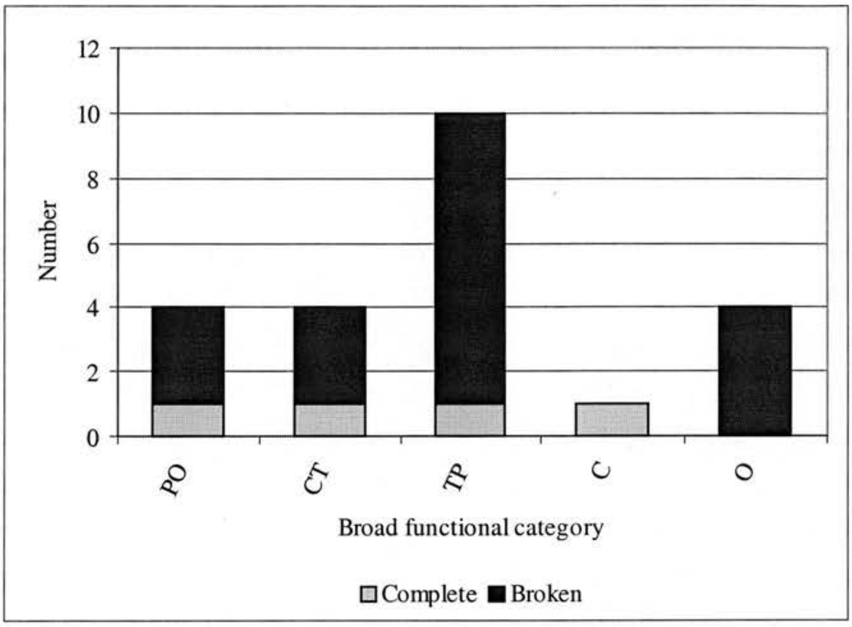

Figure 125. Occurrence of artefacts from Mylouthkia, Pit 16, Phase 2,by broad functional category and condition.

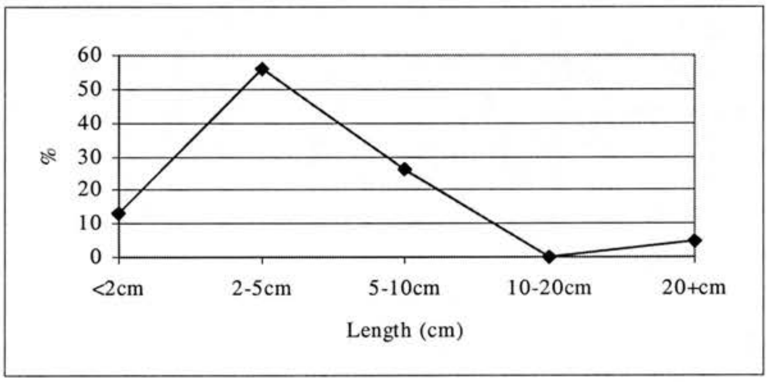

Figure 126. Occurrence of artefacts from Mylouthkia, Pit 16, Phase 2, by longest dimension.

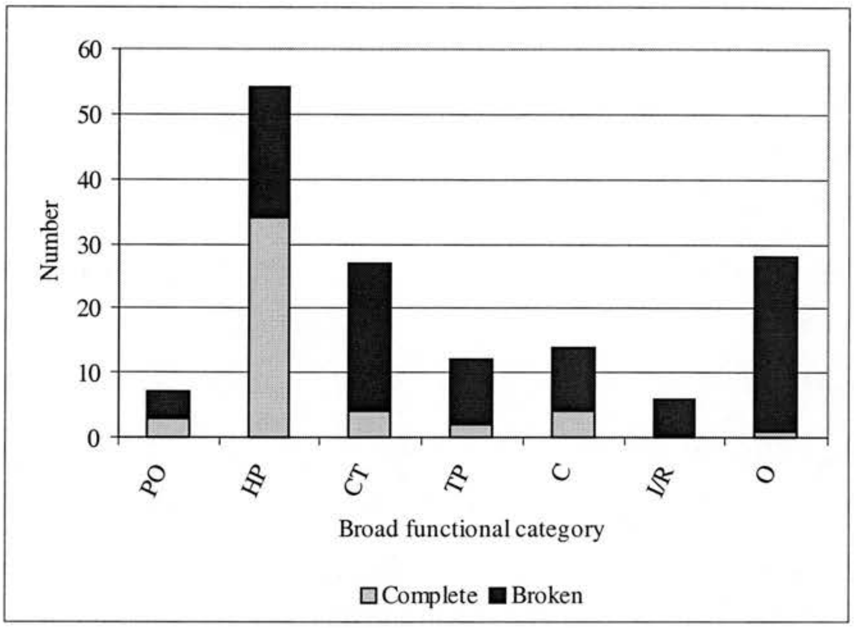

Figure 127. Occurrence of artefacts from Mylouthkia, Pit 16, Phase 3, by broad functional category and condition.

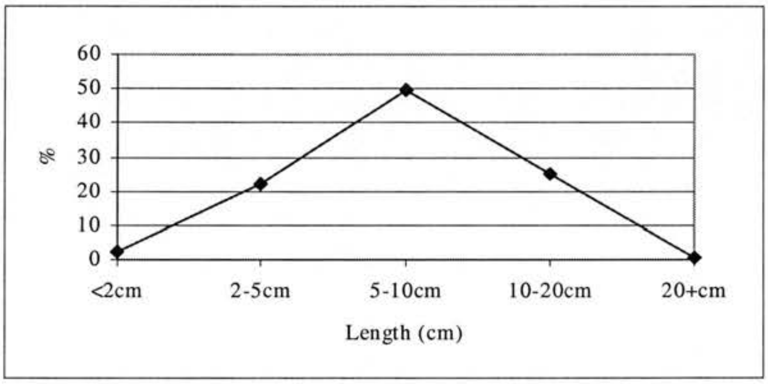

Figure 128. Occurrence of artefacts from Mylouthkia, Pit 16, Phase 3, by longest dimension.

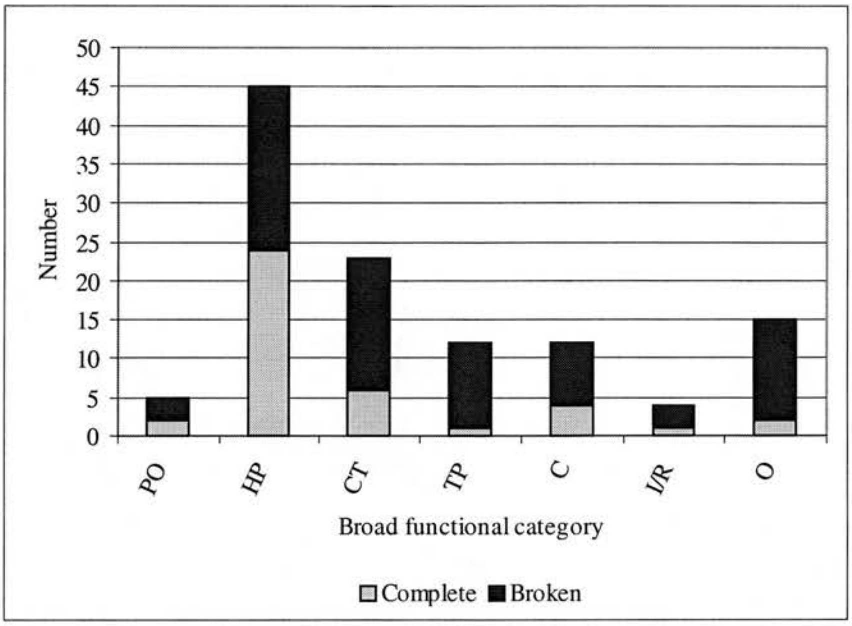

Figure 129. Occurrence of artefacts from Mylouthkia, Pit 16, Phase 4, by broad functional category and condition.

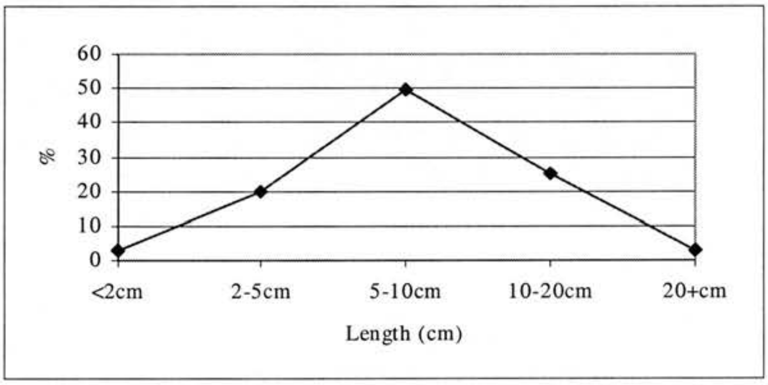

Figure 130. Occurrence of artefacts from Mylouthkia, Pit 16, Phase 4, by longest dimension.

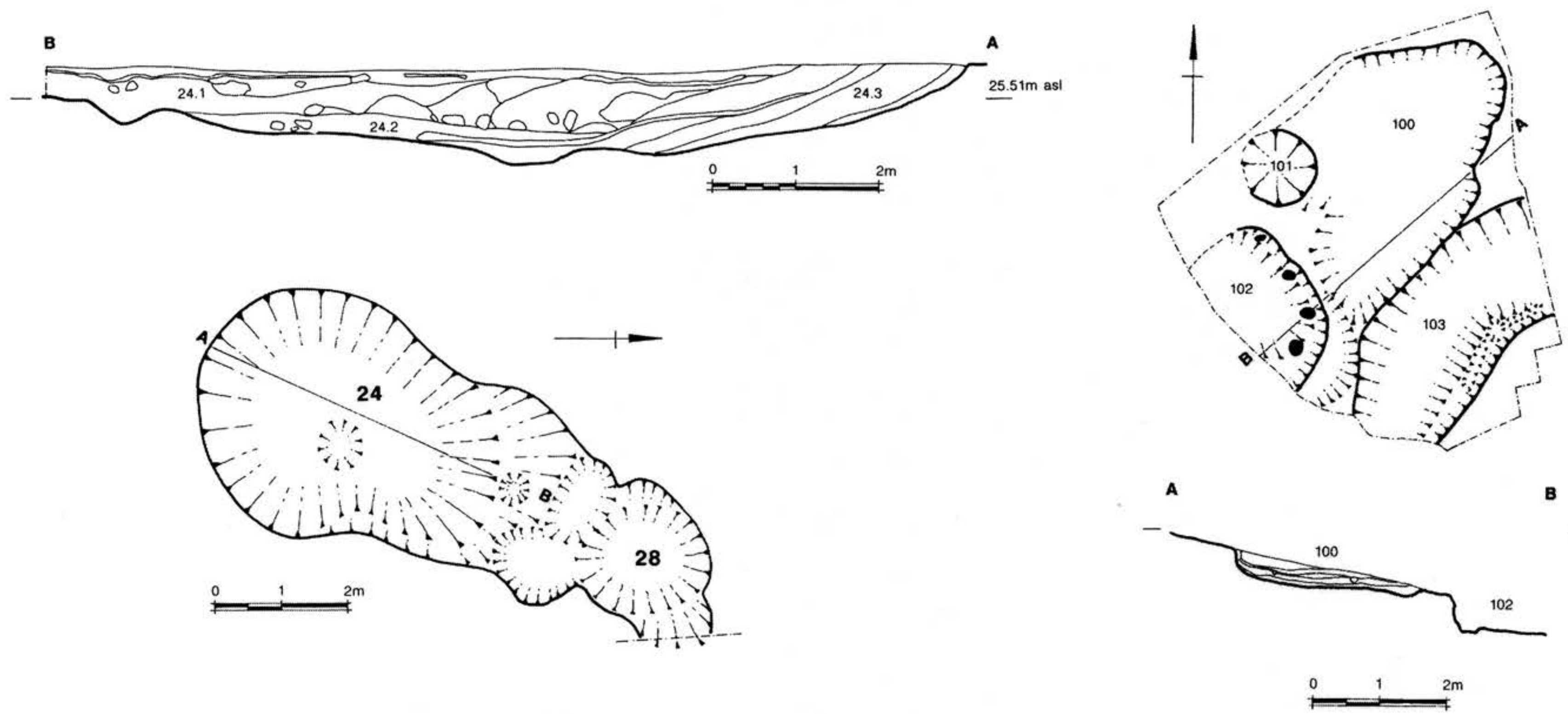

Figure 131. Plans and sections of Mylouthkia, pit 24/28 and 100-102. (Peltenburg et al. forthcoming: fig. 32)

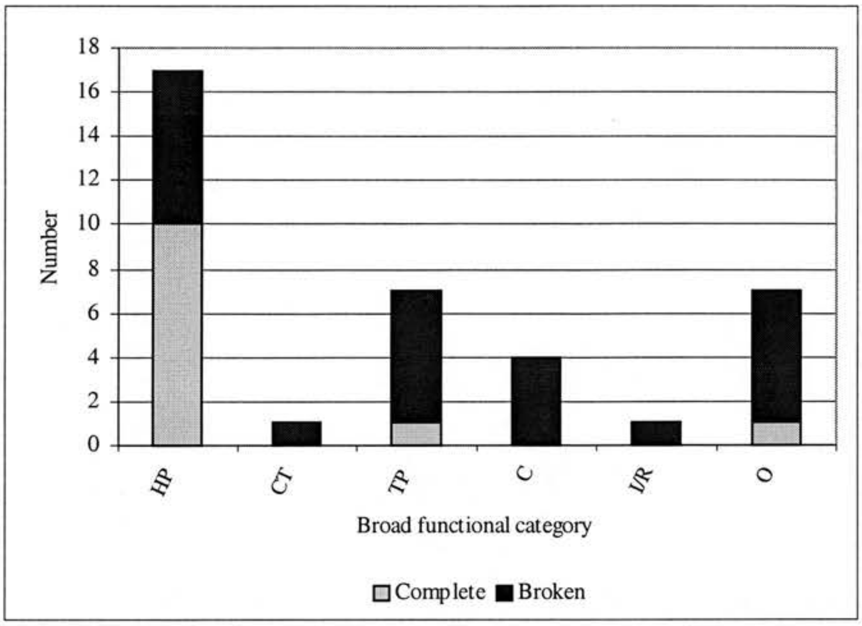

Figure 132. Occurrence of artefacts from Mylouthkia, Pit 24/28, by broad functional category and condition.

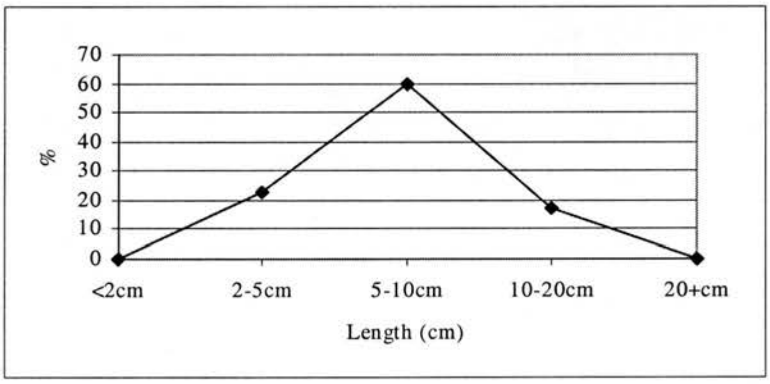

Figure 133. Occurrence of artefacts from Mylouthkia, Pit 24/28, by longest dimension.

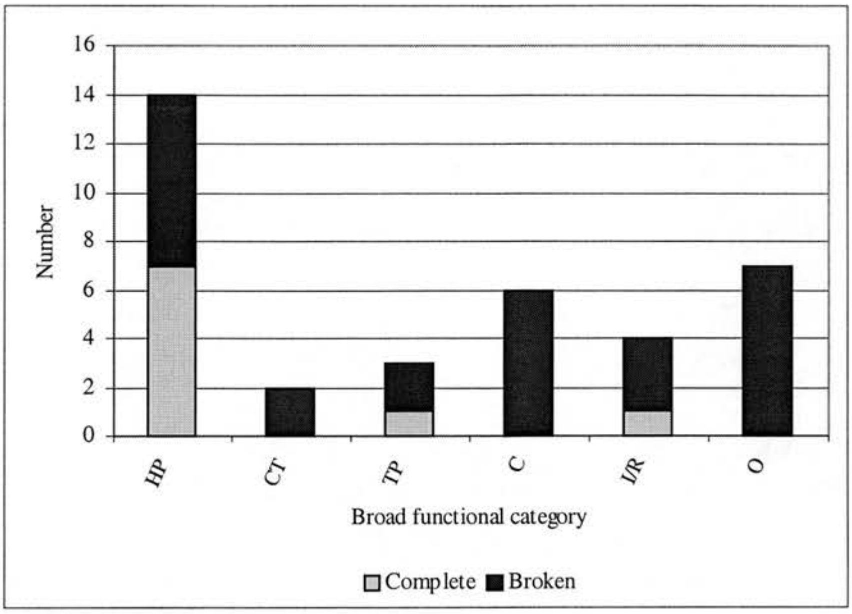

Figure 134. Occurrence of artefacts from Mylouthkia, Pit 100, by broad functional category and condition.

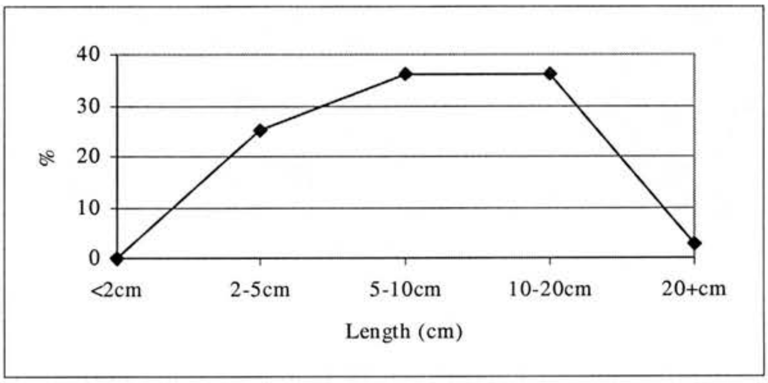

Figure 135. Occurrence of artefacts from Mylouthkia, Pit 100, by longest dimension.

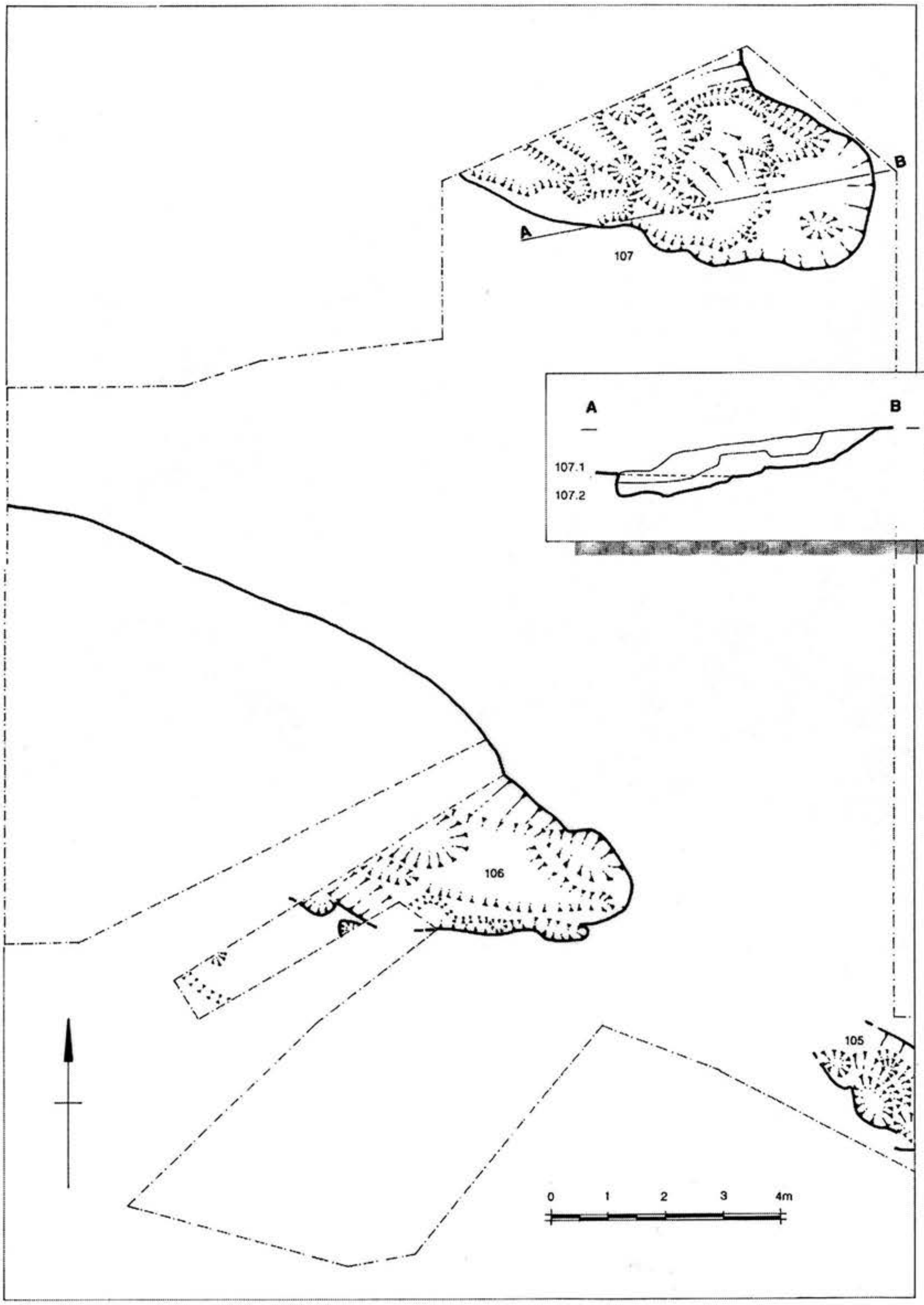

Figure 136. Plans of ditches 105 (part) and 106. Plan and section of Ditch 107. (Peltenburg et al. forthcoming: fig. 36)

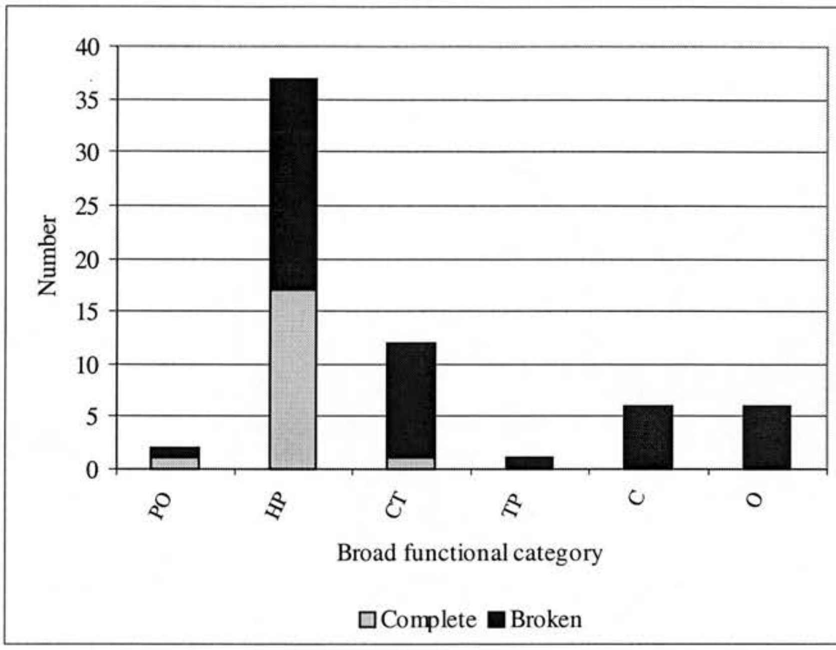

Figure 137. Occurrence of artefacts from Mylouthkia. Ditch 105, by broad functional category and condition.

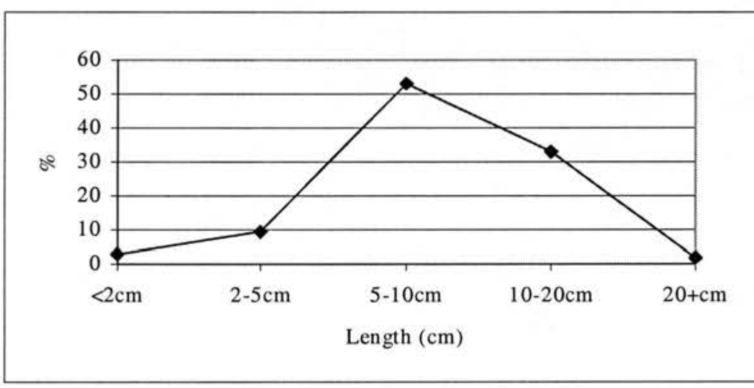

Figure 138. Occurrence of artefacts from Mylouthkia, Ditch 105, by longest dimension.

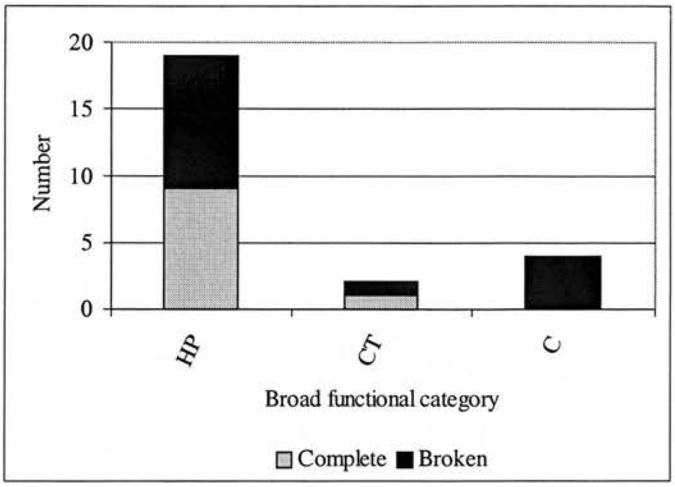

Figure 139. Occurrence of artefacts from Mylouthkia, Ditch 106, by broad functional category and condition.

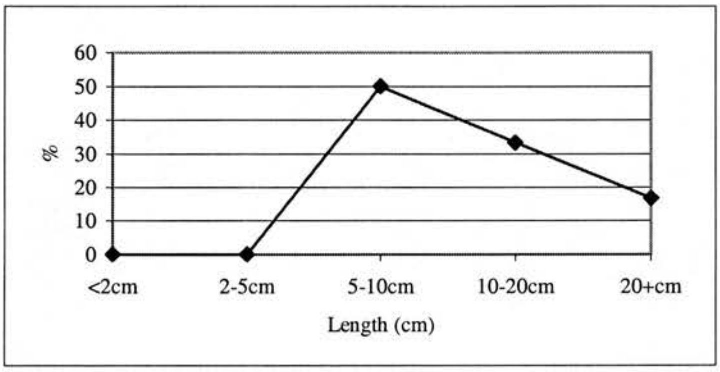

Figure 140. Occurrence of artefacts from Mylouthkia, Ditch 106, by longest dimension.

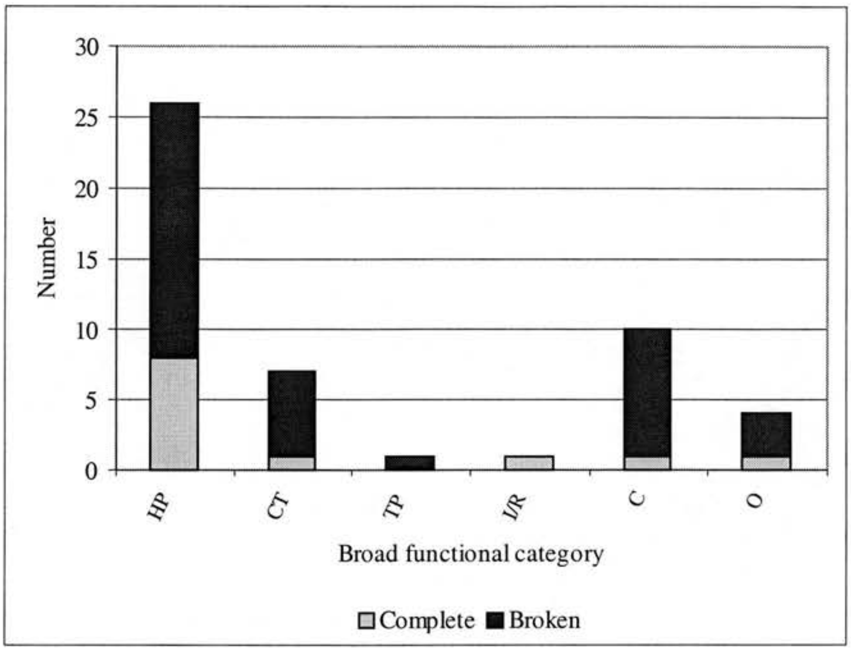

Figure 141. Occurrence of artefacts from Mylouthkia, Ditch 107, by broad functional category and condition.

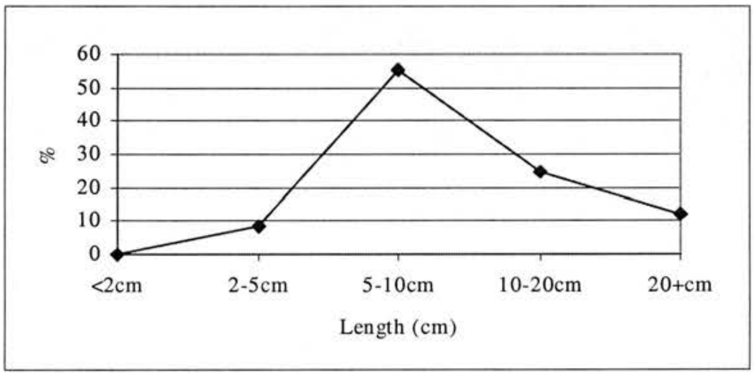

Figure 142. Occurrence of artefacts from Mylouthkia, Ditch 107, by longest dimension.

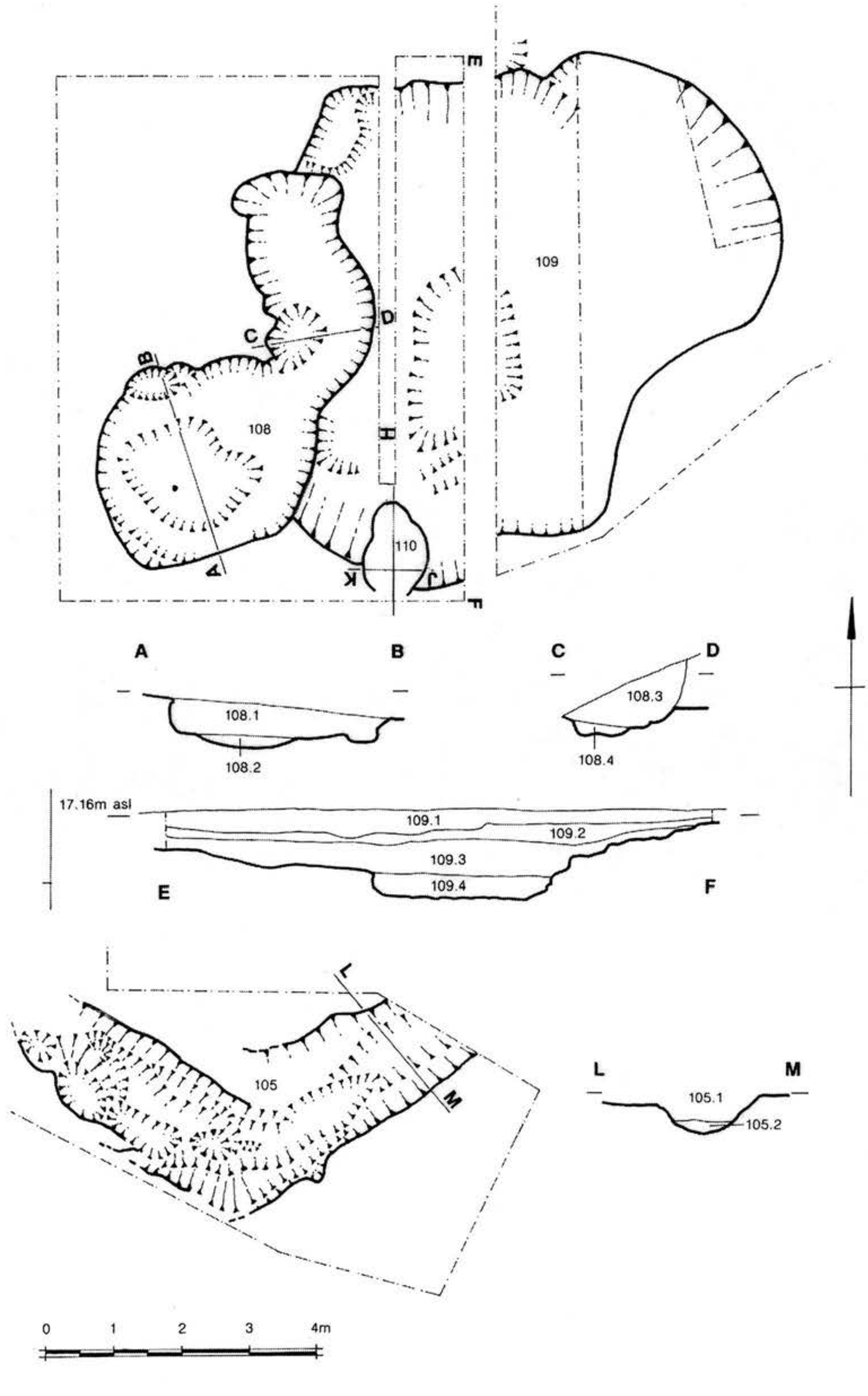

Figure 143. Plans and sections of Ditch 105, and pits 108-109. (Peltenburg et al. forthcoming: fig. 37)

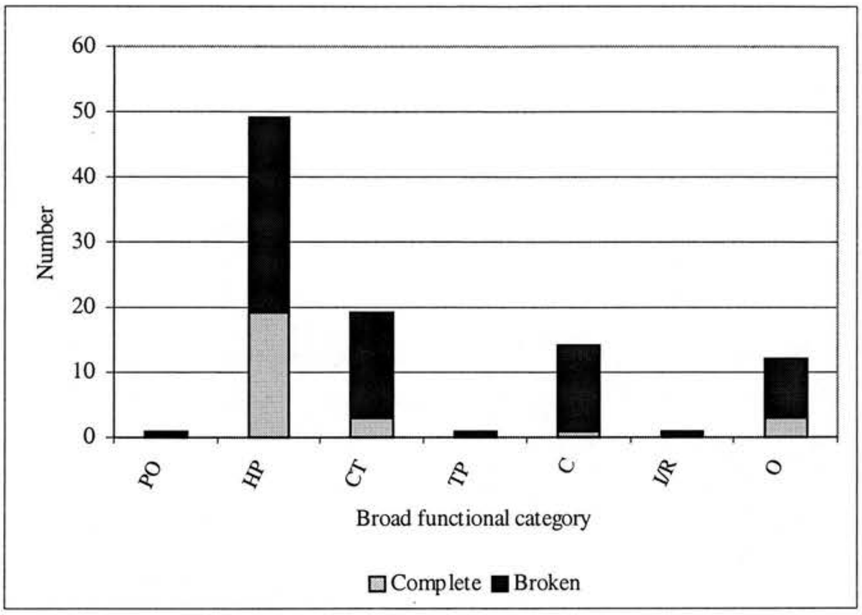

Figure 144. Occurrence of artefacts from Mylouthkia, Pit 108, by broad functional category and condition.

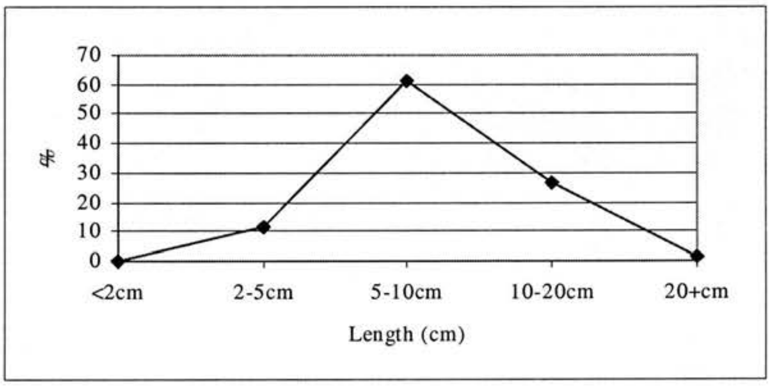

Figure 145. Occurrence of artefacts from Mylouthkia, Pit 108, by longest dimension.

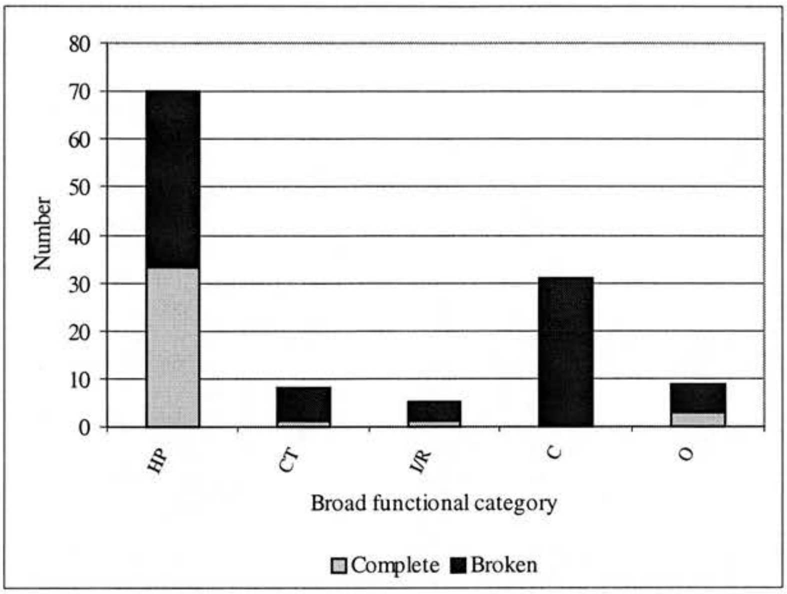

Figure 146. Occurrence of artefacts from Mylouthkia, Pit 109, by broad functional category and condition.

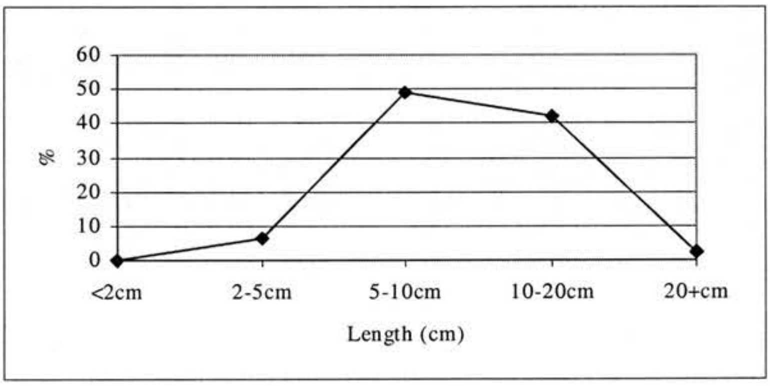

Figure 147. Occurrence of artefacts from Mylouthkia, Pit 109, by longest dimension.

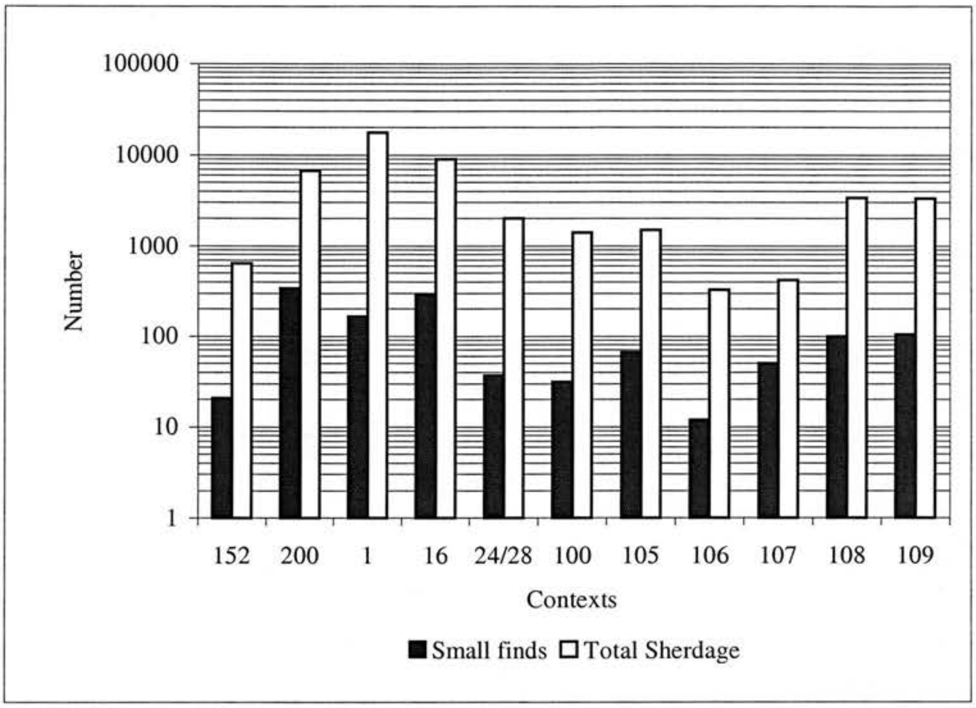

Figure 148. Occurrence of registered small finds and sherds from analysed contexts at Mylouthkia.

TABLES

OCCUPATION STAGE	TERMINOLOGY	DEFINITION
Habitation	Primary	artefactual material that is deposited in the locus of use and/or generation
	Secondary	artefactual material that is deposited away from its primary context of use and/or generation
	Provisional	artefactual material that is either provisionally deposited to await final discard in another place or stored because it has a perceived re-use value
Abandonment	De facto	artefactual material that is abandoned at its locus of use and retains a use value.
	Abandonment stage	artefactual material deposited as *primary* or *secondary* refuse that might be left in areas previously kept clean in anticipation of abandonment
	Curate behaviour	the removal of useable material from abandoned activity areas and sites

Table 1. Summary of the most commonly used classifications for refuse occurring on site during the habitation and abandonment stages.

BROAD FUNCTIONAL CATEGORY	DESCRIPTION	ARTEFACT CLASSES
Storage/administration(S/A)	Objects (generally of clay) conventionally associated with storage and administrative activity.	e.g. tokens, sealings, seals
Personal ornament (PO)	Objects (of baked clay and stone) associated with personal adornment.	e.g. beads, labrets and pendants
Heavy processing (HP)	Objects (of stone) associated with heavy processing activity (e.g. pounding, hammering and grinding)	e.g. grinders, grinding slabs, pestles and mortars
Cutting tools (CT)	Objects (of stone) associated with cutting. Category does not include chipped stone artefacts.	e.g. axes
Textile production (TP)	Objects commonly associated with aspects of textile production etc.	e.g. spindle whorls, awls, needles and perforated discs
5. Containing (C)	Objects associated with containing.	e.g. pottery vessels, stone vessels, pot stands, lids and stoppers
Ideology/ritual	Objects with symbolic or ideological associations	e.g. figurines
Projectiles (Pr)		e.g. slingmissiles
Other (O)	Various miscellaneous other objects.	e.g. unidentifiable fragments of worked objects

Table 2. Broad functional categories used in analysis of contexts and assemblages from Tell Sabi Abyad.

Room	Tokens	Sealings	Grinders/grinding slabs etc.	Labrets	Beads/Pendants	Stopper/Lid	Awl/Needle	Perforated disc	Spindle whorl	Figurine	Pottery vessel	Stone vessel	Sling missile	Other
1	-	-	*	-	-	-	-	-	*	-	*	*	*	-
2	*	-	*	*	*	-	-	*	-	-	*	-	-	-
3	*	-	*	*	-	-	*	-	-	-	*	-	*	*
4	-	-	-	-	-	-	-	-	-	-	-	-	*	-
5	-	-	*	-	-	-	-	-	-	-	-	*	*	-
6	-	-	*	-	-	-	*	-	-	-	-	*	*	-
8	-	-	*	-	-	-	-	-	-	-	*	*	-	*
9	-	-	-	-	-	-	-	-	-	-	-	-	-	*
10	-	-	*	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	*	-	-	-	*	-	-	*
General	-	-	*	-	*	*	*	*	*	-	-	*	*	*
Total	*	-	*	*	*	*	*	*	*	-	*	*	*	*

Table 3. Presence/absence of main artefact classes recovered from Tell Sabi Abyad, Building 6.I, by room.

	Complete		Damaged		Broken		Total	
Functional Category	No.	%	No.	%	No.	%	No.	%
Storage/administration	1	50	-	-	1	50	2	1.5
Personal Ornament	2	40	2	40	1	20	5	3.8
Heavy processing	13	21.5	3	14.1	29	64.4	45	34.4
Cutting tool	-	-	1	100	-	-	1	0.8
Textile production	8	34.8	4	17.4	11	47.8	23	17.6
Containing	4	25	1	6.2	11	68.8	16	12.2
Projectile	24	82.8	4	13.8	1	3.4	29	22.1
Other	5	50	-	-	5	50	10	7.6
Total	56	42.7	15	11.5	60	45.8	131	100

Table 4. Occurrence of artefacts recovered from Tell Sabi Abyad Burnt Village, Building 6.I, by broad functional category and condition.

	Complete		Damaged		Broken		Total	
Material	No.	%	No.	%	No.	%	No.	%
Clay	26	74.3	8	22.9	1	2.8	35	26.7
Pottery	9	52.9	1	5.4	7	41.2	17	13
Stone	18	29	5	9	39	62.9	62	47.3
Bone	3	21.5	1	7.1	10	71.4	14	10.7
Other	-	-	-	-	3	100	3	2.3
Total	56	42.7	15	11.5	60	45.8	131	100

Table 5. Occurrence of artefacts recovered from Tell Sabi Abyad Burnt Village, Building 6.I, material and condition.

	Complete		Damaged		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Curated	19	27.4	5	8.1	40	64.5	62	48.4
Expedient	37	56.1	6	9.1	17	25.8	66	51.6

Table 6. Percentage occurrence of curated and expedient artefacts from Tell Sabi Abyad, Building 6.I, by condition.

	Complete		Damaged		Broken		Total	
Functional Category	No.	%	No.	%	No.	%	No.	%
Storage/administration	1	100	-	-	-	-	1	3.8
Personal Ornament	2	100	-	-	-	-	2	7.7
Heavy processing	6	50	-	-	6	50	12	46.2
Textile production	-	-	1	50	1	50	2	7.7
Containing	2	66.7	-	-	1	33.3	3	11.5
Projectile	2	100	-	-	-	-	2	7.7
Other	-	-	-	-	4	100	4	15.4
Total	13	50	1	3.8	12	46.2	26	100

Table 7. Occurrence of artefacts recovered from Tell Sabi Abyad, Building 6.I, Room 3, by broad functional category and condition.

	Complete		Damaged		Broken		Total	
Material	No.	%	No.	%	No.	%	No.	%
Clay	3	75	-	-	1	25	4	15.5
Pottery	2	66.7	-	-	1	33.3	3	11.5
Stone	8	61.5	-	-	5	38.5	13	50
Bone	-	-	1	33.3	2	66.7	3	11.5
Other	-	-	-	-	3	100	3	11.5
Total	13	50	1	3.8	12	46.2	26	100

Table 8. Occurrence of artefacts recovered from Tell Sabi Abyad, Building 6.I, Room 3, by material and condition.

Room	Tokens	Sealings	Grinders/grinding slabs etc.	Labrets	Beads/Pendants	Stopper/lid	Awl/Needle	Perforated disc	Spindle whorl	Figurine	Pottery vessel	Stone vessel	Sling missile	Other
1	-	*	-	-	-	*	-	*	*	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	*	-	*	-	-	-	-	-
4	-	-	-	-	-	-	-	*	-	-	-	-	-	-
5	-	-	-	-	-	-	*	-	-	-	-	-	-	-
6	*	*	*	*	*	*	*	*	*	*	*	*	*	*
7	*	*	*	*	-	*	-	-	-	-	-	-	*	*
8	-	-	*	-	-	-	-	-	-	-	-	-	-	-
9	*	-	*	-	-	-	*	-	-	-	-	-	-	-
10	-	-	*	-	-	*	-	-	*	-	-	*	-	*
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	*	-	-	-	-	-	-	-	-	-	-	-
13	*	-	-	-	*	-	-	*	*	-	*	-	-	-
14	-	-	*	-	-	-	-	-	-	-	-	-	-	*
Total	*	*	*	*	*	*	*	*	*	*	*	*	*	*

Table 9. Presence/absence of main artefact classes recovered from Tell Sabi Abyad, Building 6.II, by room.

	Complete		Damaged		Broken		Total	
Functional Category	No.	%	No.	%	No.	%	No.	%
Storage/administration	71	23.66	4	1.34	225	75	300	54
Personal Ornament	8	57.1	-	-	6	42.9	14	2.5
Heavy processing	22	33.8	4	6.2	39	60	65	11.7
Cutting tool	2	40	1	20	2	40	5	0.9
Textile production	26	44.8	6	10.4	26	44.8	58	10.4
Containing	10	22.22	10	22.22	25	55.56	45	8.1
Ideology/ritual	-	-	-	-	19	100	19	3.4
Projectile	16	64	2	8	7	28	25	4.5
Other	4	16	2	8	19	76	25	4.5
Total	159	28.5	29	5.4	368	66.1	556	100

Table 10. Occurrence of artefacts recovered from Tell Sabi Abyad, Building 6.II, by broad functional category and condition.

	Complete		Damaged		Broken		Total	
Material	No.	%	No.	%	No.	%	No.	%
Clay	107	25.1	19	4.5	299	70.4	425	76.4
Pottery	11	52.4	2	9.5	8	38.1	21	3.8
Stone	35	38.9	6	7.8	48	53.3	89	16
Bone	5	25	2	10	13	65	20	3.6
Other	1	100	-	-	-	-	1	0.2
Total	159	28.5	29	5.4	368	66.1	556	100

Table 11. Occurrence of artefacts recovered from Tell Sabi Abyad, Building 6.II, material and condition.

	Complete		Damaged		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Curated	46	31.9	7	4.9	91	63.2	144	26.8
Expedient	110	28.1	21	5.4	260	66.5	391	73.2

Table 12. Percentage occurrence of curated and expedient artefacts from Building 6.II, by condition.

	Complete		Damaged		Broken		Total	
Functional Category	No.	%	No.	%	No.	%	No.	%
Storage/administration	62	24.2	2	0.8	192	75	256	62.6
Personal Ornament	6	54.5	-		5	45.5	11	2.6
Heavy processing	6	25.9	3	14.85	15	59.25	24	5.9
Cutting tools	-		1	50	1	50	2	0.5
Textile production	20	45.2	4	9.6	15	45.2	39	9.5
Containing	9	29	8	26	14	45	31	7.6
Ideology/ritual	-	-	-	-	18	100	18	4.4
Projectile	12		1		5		18	4.4
Other	2	54.3	1	8.8	7	37.1	10	2.4
Total	117	28.8	20	4.9	272	66.3	409	100

Table 13. Occurrence of artefacts recovered from Tell Sabi Abyad, Building 6.II, Room 6, by broad functional category and condition.

	Complete		Damaged		Broken		Total	
Material	No.	%	No.	%	No.	%	No.	%
Clay	90	25.9	14	4	244	70.1	348	85.1
Pottery	9	64.9	1	7.1	4	28	14	3.4
Stone	13	37.2	5	14.3	17	48.5	35	8.6
Bone	4	26.4	-	-	7	63.6	11	2.7
Shell	1	100	-	-	-	-	1	0.2
Total	117	28.6	20	4.7	272	66.7	409	100

Table 14. Occurrence of artefacts recovered from Tell Sabi Abyad, Building 6.II, Room 6, material and condition.

	Complete		Damaged		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Curated	13	21.7	3	5	44	73.3	60	15.3
Expedient	102	20.1	16	4.7	221	65.2	339	84.7

Table 15. Percentage occurrence of curated and expedient artefacts from Building 6.II, Room 6, by condition.

	Complete		Damaged		Broken		Total	
Functional Category	No.	%	No.	%	No.	%	No.	%
Storage/administration	5	15.6	2	6.3	25	78.1	32	55.2
Personal ornament	1	50	-	-	1	50	2	3.4
Heavy processing	-	-	-	-	4	100	4	6.9
Containing	-	-	2	40	3	60	5	8.6
Ideology/ritual	-	-	-	-	1?	100	1?	1.7
Other	2	14.3	1	7.1	11	78.6	14	24.2
Total	9	15.5	5	8.6	44	75.9	58	100

Table 16. Occurrence of artefacts recovered from Tell Sabi Abyad, Building 6.II, Room 7, by broad functional category and condition.

	Complete		Damaged		Broken		Total	
Material	No.	%	No.	%	No.	%	No.	%
Clay	7	14	4	8	39	78	50	86.2
Pottery	1	50	-	-	1	50	2	3.4
Stone	1	10	-	-	4	80	5	8.6
Bone	-	-	1	100	-	-	1	1.8
Total	9	15.5	5	8.6	44	75.9	58	100

Table 17. Occurrence of artefacts recovered from Tell Sabi Abyad, Building 6.II, Room 7, material and condition.

	Complete		Damaged		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Curated	2	28.6	-	-	5	71.4	7	15.6
Expedient	7	18.4	4	10.5	27	71.1	38	84.4

Table 18. Percentage occurrence of curated and expedient artefacts from Tell Sabi Abyad, Building 6.II, Room 7, by condition.

	Complete		Damaged		Broken		Total	
Functional Category	No.	%	No.	%	No.	%	No.	%
Storage/administration	2	67	-	-	1	33	3	12
Personal ornament	1	100	-	-	-	-	1	4
Heavy processing	3	27.3	1	9.1	7	63.6	11	44
Textile production	1	25	1	25	2	50	4	16
Containing	-	-	-	-	3	100	3	12
Other	1	33	1	33	1	33	3	12
Total	8	32	3	12	14	56	25	100

Table 19. Occurrence of artefacts recovered from Tell Sabi Abyad, Building 6.II, Room 7, 'other rooms', by broad functional category and condition.

	Complete		Damaged		Broken		Total	
Material	No.	%	No.	%	No.	%	No.	%
Clay	3	50	1	16.7	2	33.3	6	24
Pottery	-	-	-	-	1	100	1	4
Stone	3	22.2	2	11.1	10	67	15	60
Bone	2	67	-	-	1	33	3	12
Total	8	32	3	12	14	56	25	100

Table 20. Occurrence of artefacts recovered from Tell Sabi Abyad, Building 6.II, Room 7, 'other rooms', by material and condition.

	Complete		Damaged		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Curated	6	33.4	1	5.5	11	61.1	18	45
Expedient	5	22.7	3	13.7	14	63.6	22	55

Table 21. Percentage occurrence of curated and expedient artefacts from Building 6.II, 'other rooms' by condition.

	Complete		Damaged		Broken		Total	
Functional Category	No.	%	No.	%	No.	%	No.	%
Storage/administration	4	36.3	2	18.2	5	45.5	11	19.3
Personal ornament	2	100	-	-	-	-	2	3.5
Heavy processing	8	44.4	3	22.3	6	33.3	17	29.8
Cutting tools	-	-	1	100	-	-	1	1.8
Textile production	1	16.7	1	33.3	2	50	4	7
Containing	1	16.7	-	-	5	83.3	6	10.6
Ideology/ritual	1	12.5	-	-	7	87.5	8	14
Projectile	1	25	2	50	1	25	4	7
Other	-	-	2	50	2	33.2	4	7
Total	18	31.6	11	19.3	28	49.1	57	100

Table 22. Occurrence of artefacts recovered from Tell Sabi Abyad, Building 6.IX, by broad functional category and condition.

	Complete		Damaged		Broken		Total	
Material	No.	%	No.	%	No.	%	No.	%
Clay	6	28.6	4	19	11	52.4	21	36.8
Pottery	2	25	2	12.5	4	50	8	14
Stone	10	43.5	4	17.4	9	39.1	23	40.4
Bone	-	-	1	25	3	75	4	7
Other	-	-	-	-	1	100	1	1.8
Total	18	31.6	11	19.3	28	49.1	57	100

Table 23. Occurrence of artefacts recovered from Tell Sabi Abyad, Building 6.IX, material and condition.

	Complete		Damaged		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Curated	11	32.4	5	14.7	18	52.9	34	63
Expedient	6	30	7	35	7	35	20	27

Table 24. Percentage occurrence of curated and expedient artefacts from Building 6.IX, by condition.

Room	Tokens	Sealings	Grinders/Grinding slabs etc.	Labrets	Beads	Stopper/Lid	Awl	Pierced disc	Spindle whorl	Figurine	Potetry vessel	Stone vessel	Sling missile	Other
1	-	-	-	-	-	-	-	-	-	*	-	-	-	-
2	-	-	*	-	-	-	-	-	-	-	-	*	-	-
3	-	-	*	-	-	-	*	-	-	-	*	-	-	*
6	-	-	*	-	-	-	-	-	-	-	-	-	-	-
7	-	-	*	-	-	-	-	-	-	-	-	-	-	*
8	-	-	*	-	-	-	-	-	-	-	-	-	-	-
12	-	-	*	-	-	-	-	-	-	*	-	-	-	*
Total	*	-	*	-	*	-	*	-	-	*	*	*	-	*

Table 25. Presence/absence of main artefact classes recovered from Tell Sabi Abyad, Building 6.XII, by room.

	Complete		Damaged		Broken		Total	
Functional Category	No.	%	No.	%	No.	%	No.	
Storage/administration	1	100	-	-	-	-	1	3.4
Personal ornament	3	75	-	-	1	25	4	13.7
Heavy processing	4	40	-	-	6	60	10	34.5
Textile production	-	-	-	-	1	100	1	3.4
Containing	1	-	-	-	6		7	24.1
Ideology/ritual	1	50	-	-	1	50	2	6.8
Other	-	-	-	-	4	100	4	13.7
Total	10	34.5	-	-	19	65.5	29	100

Table 26. Occurrence of artefacts recovered from Tell Sabi Abyad, Building 6.XII, by broad functional category and condition.

	Complete		Broken		Total	
Material	No.	%	No.	%	No.	%
Clay	1	50	1	50	2	6.9
Pottery	1	50	1	50	2	6.9
Stone	7	31.8	15	68.2	22	75.9
Bone	-	-	3	100	3	10.3
Total	9	31	20	69	29	100

Table 27. Occurrence of artefacts recovered from Tell Sabi Abyad, Building 6.XII, material and condition.

	Complete		Damaged		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Curated	5	25	-	-	15	75	20	80
Expedient	4	80	-	-	1	20	5	20

Table 28. Percentage occurrence of curated and expedient artefacts from Building 6.XII, by condition.

ROOM	TOKENS	SEALINGS	GRINDERS/GRINDING SLABS ETC.	LABRETS	BEADS	STOPPER/LID	AWLS/NEEDLES	PERFORATED DISC	SPINDLE WHORL	FIGURINE	POTTERY VESSEL	STONE VESSEL	SLING MISSILE	OTHER
1	-	-	*	-	-	-	-	*	*	-	*	-	-	-
2	*	*	*	*	*	*	-	*	*	*	*	*	-	*
3	-	-	-	-	-	-	-	-	-	-	-	*	-	-
4	*	-	*	-	-	-	-	-	-	-	-	*	-	*
5	-	-	*	-	-	*	-	*	-	-	-	-	*	-
Total	*	*	*	*	*	*	-	*	*	*	*	*	*	*

Table 29. Presence/absence of main artefact classes recovered from Tell Sabi Abyad, Building 6.XIV, by room.

	Complete		Damaged		Broken		Total	
Functional Category	No.	%	No.	%	No.	%	No.	%
Storage/administration	4	57.1	2	28.6	1	14.3	7	7.4
Personal ornament	4	57.1	3	42.9	-	-	7	7.4
Heavy processing	12	50	-	-	12	50	24	25.4
Textile production	8	71.4	-	-	4	18.6	12	12.8
Containing	1	5.8	2	11.8	14	82.4	17	18.1
Ideology/ritual	-	-	-	-	10	100	10	10.8
Projectile	-	-	-	-	1	100	1	1.1
Other	-	-	1	5.3	15	84.1	16	17
Total	29	30.9	8	8.5	57	60.6	94	100

Table 30. Occurrence of artefacts recovered from Tell Sabi Abyad, Building 6.XIV, by broad functional category and condition.

	Complete		Damaged		Broken		Total	
Material	No.	%	No.	%	No.	%	No.	%
Clay	8	25	3	9.4	21	65.6	32	34
Pottery	7	29.2	5	20.8	12	50	24	15.5
Stone	19	51.4	-	-	18	48.6	37	39.4
Other	-	-	-	-	1	100	1	1.1
Total	29	30.9	8	8.5	57	60.6	94	100

Table 31. Occurrence of artefacts recovered from Tell Sabi Abyad, Building 6.XIV, by material and condition.

	Complete		Damaged		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Curated	12	25.5	4	8.5	31	66	47	58.8
Expedient	18	54.5	4	12.2	11	33.3	33	41.2

Table 32. Percentage occurrence of curated and expedient artefacts from Building 6.XIV, by condition.

	Complete		Damaged		Broken		Total	
Functional Category	No.	%	No.	%	No.	%	No.	%
Storage/administration	3	50	2	16.7	1	33.3	6	8.3
Personal ornament	4	57.1	3	42.9	-	-	7	9.7
Heavy processing	9	50	-	-	9	50	18	25
Textile production	3	100	-	-	-	-	3	4.2
Containing	-	-	2	18.2	9	81.8	11	15.3
Ideology/ritual	-	-	-	-	10	100	10	13.9
Other	5	29.4	2	11.8	10	58.8	17	23.6
Total	24	33.3	9	12.5	39	54.2	72	100

Table 33. Occurrence of artefacts recovered from Tell Sabi Abyad, Building 6.XIV, Room 2, by broad functional category and condition.

	Complete		Damaged		Broken		Total	
Material	No.	%	No.	%	No.	%	No.	%
Clay	6	20.7	4	13.8	19	65.5	29	40.3
Pottery	1	6.7	5	33.3	9	60	15	20.8
Stone	17	63	-	-	10	37	27	37.5
Other	-	-	-	-	1	100	1	1.4
Total	24	33.3	9	12.5	39	54.2	72	100

Table 34. Occurrence of artefacts recovered from Tell Sabi Abyad Building 6.XIV, Room 2, by material and condition.

	Complete		Damaged		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Curated	7	20	4	11.4	24	68.6	35	59.3
Expedient	13	54.2	3	12.5	8	33.3	24	40.7

Table 35. Percentage occurrence of curated and expedient artefacts from Building 6.XIV, Room 2, by condition.

Open Area	Tokens	Sealings	Grinders/Grinding Slabs etc.	Labrets	Beads/Pendants	Stopper/Lid	Awl/Needle	Perforated Disc	Spindle Whorl	Figurine	Pottery Vessel	Stone Vessel	Sling Missile	Other
1	-	-	*	-	*	-	-	*	-	-	-	*	-	*
2	-	-	-	-	*	-	-	-	-	-	-	*	-	-
3	-	*	*	*	-	-	*	-	-	-	-	-	-	*
4	-	-	*	*	-	*	-	-	-	-	-	*	-	-
5	*	-	*	-	*	-	-	*	-	-	*	*	-	*
6	*	-	*	-	*	-	*	*	*	*	*	-	*	*
Total	*	*	*	*	*	-	*	*	*	*	*	*	*	*

Table 36. Presence/absence of main artefact classes recovered from Tell Sabi Abyad, Level 6, Open Areas 1-6.

	Open Area						
Functional Category	1	2	3	4	5	6	Total
Storage/administration	0	0	2	0	1	1	4
Personal Ornament	2	2	3	1	1	1	10
Heavy processing	1	4	0	6	3	3	17
Cutting tool	0	0	0	0	0	1	1
Textile production	2	2	3	2	1	4	14
Containing	2	4	1	4	1	3	15
Ideology/Ritual	0	1	1	0	0	2	4
Projectile	0	0	0	2	0	4	6
Other	1	0	2	0	1	1	5
Total	8	13	12	15	8	20	76

Table 37. Occurrence of artefacts recovered from Tell Sabi Abyad, Level 6, Open Areas 1-6, by broad functional category.

	Complete		Damaged		Broken		Total	
Functional Category	No.	%	No.	%	No.	%	No.	%
Storage/administration	1	25	-	-	3	75	4	5.3
Personal ornament	7	70	-	-	3	30	10	13.2
Heavy processing	-	-	1	5.9	16	94.1	17	22.4
Cutting tool	-	-	1	100	-	-	1	1.3
Textile production	6	42.8	4	28.6	4	28.6	14	18.4
Containing	2	13.3	-	-	13	86.7	15	19.6
Ideology/Ritual	-	-	-	-	4	100	4	5.3
Projectile	5	83.3	1	16.7	-	-	6	7.9
Other	2	40	-	-	3	60	5	6.6
Total	23	30.3	7	9.2	46	60.5	76	100

Table 38. Occurrence of artefacts recovered from Tell Sabi Abyad, Level 6, Open Areas 1-6, by broad functional category and condition.

	Complete		Damaged		Broken		Total	
Material	No.	%	No.	%	No.	%	No.	%
Clay	7	33.3	3	14.3	11	52.4	21	27.6
Pottery	5	45.5	1	9	5	45.5	11	14.5
Stone	6	18.2	2	6	25	75.8	33	43.4
Bone	4	40	1	10	5	50	10	13.2
Other	1	100	-	-	-	-	1	1.3
Total	23	30.3	7	9.2	46	60.5	76	100

Table 39. Occurrence of artefacts recovered from Tell Sabi Abyad, Level 6, Open Areas 1-6, by material and condition.

	Complete		Damaged		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Curated	10	25.6	3	7.7	26	66.7	39	56.5
Expedient	15	50	5	16.7	10	33.3	30	43.5

Table 40. Percentage occurrence of curated and expedient artefacts from Tell Sabi Abyad, Level 6, Open Areas 1-6, by condition.

	Complete		Damaged		Broken		Total	
Functional Category	No.	%	No.	%	No.	%	No.	%
Storage/administration	29	63.1	6	13	11	23.9	46	30.9
Personal ornament	5	41.7	2	16.6	5	41.7	12	8
Heavy processing	2	11.8	-	-	15	88.2	17	11.4
Cutting tools	-	-	-	-	1	100	1	0.7
Textile production	22	73.3	1	3.3	7	13.4	30	20.1
Containing	1	4.8	-	-	20	95.2	21	14.1
Ideology/ritual	-	-	-	-	2	100	2	1.4
Projectile	1	33.3	2	66.7	-	-	3	2
Other	9	52.9	3	17.6	5	29.5	17	11.4
Total	69	46.3	14	9.4	66	44.3	149	100

Table 41. Occurrence of artefacts recovered from Tell Sabi Abyad, Levels 6 and 7, T12 midden deposits, by broad functional category and condition.

	Complete		Damaged		Broken		Total	
Material	No.	%	No.	%	No.	%	No.	%
Clay	36	52.2	10	14.5	23	33.3	69	46.3
Pottery	9	39.2	3	13	11	47.8	23	15.4
Stone	9	24.5	1	2.7	27	72.8	37	24.8
Bone	15	100	-	-	-	-	15	10.1
Other	-	-	-	-	5	100	5	3.4
Total	69	46.3	14	9.4	66	44.3	149	100

Table 42. Occurrence of artefacts recovered from Tell Sabi Abyad Burnt Village, Levels 6 and 7, T12 midden deposits, by material and condition.

	Complete		Damaged		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Curated	8	16.3	4	8.2	37	75.5	49	35
Expedient	59	64.8	7	6.6	26	28.6	91	65

Table 43. Percentage occurrence of curated and expedient artefacts from T12 midden deposits, by condition.

Room	Tokens	Sealings	Grinders/Grinding slabs etc.	Labrets	Beads	Stopper/Lid	Awl/Needle	Perforated disc	Spindle whorl	Figurine	Pottery vessel	Stone vessel	Sling missile	Other
2	-	-	*	-	-	-	-	-	*	-	-	-	-	-
3	-	-	*	-	-	-	-	-	-	-	-	*	-	-
4	-	-	-	-	-	-	*	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	*	-	-	-
7	-	-	*	-	*	-	-	-	-	-	-	-	-	-
8	-	-	*	-	-	-	*	-	-	-	-	-	-	-
9	-	-	*	-	-	-	-	-	-	-	-	-	-	-
10	-	-	*	*	-	-	-	-	-	-	-	-	-	*
11	-	-	*	-	-	-	-	-	-	-	-	-	-	-
12	-	-	*	-	-	-	-	-	-	-	-	-	-	-
14	*	-	-	*	-	-	*	*	-	-	-	*	-	*
15	-	-	*	-	-	-	*	-	-	-	-	-	-	-
16	-	-	*	-	-	-	*	-	-	-	*	*	*	-
Total	*	-	*	*	*	-	*	*	-	-	*	*	*	*

Table 44. Presence/absence of main artefact classes recovered from Tell Sabi Abyad, Building 5.I, by room.

	Complete		Damaged		Broken		Total	
Functional Category	No.	%	No.	%	No.	%	No.	%
Storage/administration	2	66.7	-	-	1	33.3	3	6.2
Personal ornament	5	71.4	-	-	2	28.6	7	14.6
Heavy processing	1	7.7	2	15.4	10	76.9	13	27.1
Cutting tool					2	100	2	4.2
Textile production	2	20	3	30	5	50	10	20.8
Containing	-	-	-	-	5	100	5	10.4
Projectile	2	33.3	1	66.7	-	-	3	6.2
Other	2	40	1	10	2	40	5	10.4
Total	14	29.2	7	14.6	27	54.2	48	100

Table 45. Occurrence of artefacts recovered from Tell Sabi Abyad Building 5.I, by broad functional category and condition.

	Complete		Damaged		Broken		Total	
Material	No.	%	No.	%	No.	%	No.	%
Clay	5	71.4	1	14.3	1	14.3	7	14.6
Pottery	1	25	1	50	2	25	4	8.3
Stone	6	21.4	4	14.3	18	64.3	28	58.3
Bone	1	14.3	1	14.3	5	71.4	7	14.6
Other	1	50	-	-	1	50	2	4.2
Total	14	29.2	7	14.6	27	54.2	48	100

Table 46. Occurrence of artefacts recovered from Tell Sabi Abyad, Building 5.I, by material and condition.

	Complete		Damaged		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Curated	6	21.4	3	10.7	19	67.9	28	60.9
Expedient	6	33.3	5	27.8	7	38.9	18	39.1

Table 47. Percentage occurrence of curated and expedient artefacts from Tell Sabi Abyad, Building 5.I, by condition.

Room	Tokens	Sealings	Grinders/Grinding slabs etc.	Labrets	Beads/Pendants	Stopper/Lid	Awl/Needle	Perforated disc	Spindle whorl	Figurine	Pottery vessel	Stone vessel	Sling missile	Other
1	-	-	-	-	-	-	*	*	*	-	*	-	-	-
2	-	-	*	-	-	-	-	-	-	-	-	-	-	*
3	-	-	-	*	-	-	*	-	-	-	-	-	-	-
4	-	-	-	*	-	-	-	-	-	-	*	-	-	-
General	-	-	*	*	*	-	-	*	-	-	-	-	-	*
Total	-	-	*	*	*	-	*	*	-	-	*	-	-	*

Table 48. Presence/absence of main artefact classes recovered from Tell Sabi Abyad, Building 5.II, by room.

	Complete		Broken		Total	
Functional Category	No.	%	No.	%	No.	%
Personal ornament	2	50	2	50	4	16
Heavy processing	-	-	4	100	4	16
Textile production	4	57.1	3	42.9	7	28
Containing	-	-	4	100	4	16
Other	1	16.7	5	83.3	6	24
Total	7	28	18	72	25	100

Table 49. Occurrence of artefacts recovered from Tell Sabi Abyad, Building 5.II, by broad functional category and condition.

	Complete		Broken		Total	
Material	No.	%	No.	%	No.	%
Clay	2	40	3	60	5	20
Pottery	3	33.3	6	66.7	9	36
Stone	1	21.4	6	83.3	7	28
Bone	1	25	3	75	4	16
Total	7	28	18	72	25	100

Table 50. Occurrence of artefacts recovered from Tell Sabi Abyad, Building 5.II, by material and condition.

	Complete		Damaged		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Curated	7	53.8	-	-	6	46.2	13	59.1
Expedient	4	44.4	-	-	5	55.6	9	40.9

Table 51. Percentage occurrence of curated and expedient artefacts from Tell Sabi Abyad, Building 5.II, by condition.

CONTEXT	TOKENS	SEALINGS	GRINDERS/GRINDING SLABS ETC.	LABRETS	BEADS/PENDANTS	STOPPER/LID	AWL/NEEDLE	PERFORATED DISC	SPINDLE WHORL	FIGURINE	POTTERY VESSEL	STONE VESSEL	SLING MISSILE	OTHER
Burnt Village Level 6														
Building II	*		*	*	*	*	*	*			*	*	*	*
Building II	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Building XII	*		*		*		*			*	*	*		*
Building XIV	*	*	*	*	*	*		*	*	*	*	*	*	*
Building IX	*	*	*		*		*	*	*	*	*		*	*
Open Areas 1-6	*	*	*	*	*		*	*	*	*	*	*	*	*
T12 Midden	*	*	*	*	*	? *	?	*	*	? *	*	*	*	*
Level 5														
Building I	*		*	*	*		*	*	*		*	*	*	*
Building II			*	*	*		*	*	*		*			*

Table 52. Presence/absence of main artefact classes recovered from all contexts analysed at Tell Sabi Abyad, by broad context.

CONTEXT	FIND COUNT	SHERD COUNT
Level 6, Building 1	134	2130
Level 6, Building 2	556	3095
Level 6, Building 12	29	606
Level 6, Building 14	94	1791
Level 6, Tholoi 9	57	299
Level 6, Open Areas 1	8	405
Level 6, Open Areas 2	13	642
Level 6, Open Areas 3	12	702
Level 6, Open Areas 4	15	164
Level 6, Open Areas 5	21	470
Level 6, Open Areas 6	20	751
T12 Midden Sounding	149	3396
Level 5, Building 1	48	2590
Level 5, Building 2	25	1204

Table 53. Small find and sherd counts from major contexts analysed at Tell Sabi Abyad..

Context	Less than 2cm	2cm to 5cm	5cm to 10cm	10 to 20cm	Greater than 20cm
Building 1	5.9	34.3	36.3	20.6	2.9
Building 2	5.3	57.1	22.8	12.6	2.2
Tholoi 9	15.1	47.2	20.8	15.1	1.8
Building 14	17.1	35.5	31.6	14.5	1.3
Building 12	13	21.8	30.4	34.8	0
Open Areas 1-6	5.6	40.3	23.5	25	5.6
T12 Midden	32.7	39.6	18.7	9	0
Level 5, Building 1	15.2	24.2	39.4	15.2	6
Level 5, Building 2	14.3	23.8	33.3	28.6	0
Average totals	13.8	36	28.5	19.5	2.2

Table 54. Percentage occurrence of measured artefacts recovered from all contexts analysed from Tell Sabi Abyad, by longest dimension.

Level	6.I	6.II	6.II Room 6	6.II Room 7	6.II other	6.XII	6.XIV	6.IX	OA 1-6	T12	5.I	5.I
6.I	-	34.5			73.3	64.1	66.2	70	73.5	58.3	75.2	48.8
6.II	34.5	-	-	-	-	36.9	48.35	62.4	53	76.6	48.8	36.2
6.II Room 6		-	-	75.5	45.7	30.6	41	53.7	57.1	62.9	37.6	28.1
6.II Room 7		-	75.5	-	38.5	37.9	45	47.4	34.1	67.6	35.8	42.9
6.II other	73.3	-	45.7	38.5	-	57.2	62.4	73.5	67.4	63.5	77.7	51.9
6.XII	64.1	36.9	30.6	37.9	57.2	-	78.1	68.1	73.3	53.3	68.6	63
6.XIV	66.2	48.35	41	45	62.4	78.1	-	76	79.3	67	73.9	69.2
6.IX	70	62.4	53.7	47.4	73.5	68.1	76	-	72.3	66.3	69.3	47.5
OA	73.5	53	57.1	34.1	67.4	73.3	79.3	72.3	-	68.4	82.85	72.7
T12	58.3	76.6	62.9	67.6	63.5	53.3	67	66.3	68.4	-	69.2	64.5
5.I	75.2	48.8	37.6	35.8	77.7	68.6	73.9	69.3	82.85	69.2	-	72.2
5.II	48.8	36.2	28.1	42.9	51.9	63	69.2	47.5	72.7	64.5	72.2	-

Table 55. Robinson's coefficient of similarity for various building and other contexts from Tell Sabi Abyad.

BROAD FUNCTIONAL CATEGORY	DESCRIPTION	ARTEFACT CLASSES
Personal ornament (PO)	Objects used for personal ornament (including metal, stone and shell)	e.g. necklaces, bracelets, earrings and pins
Heavy processing (HP)	Objects used for heavy processing, particularly for food	e.g. querns and rubbers
Cutting tools (CT)	Objects used for cutting (not including chipped stone blades)	e.g. axes
Containing equipment (C)	Objects used for, or associated with, containing	e.g. vessels, lids, stoppers, pot stands
Ideology/ritual (I/R)	Objects invested with possible ritual or symbolic meaning	e.g. figurines
Weaponry (W)	Objects with 'militaristic' associations, whether of practical or symbolic purpose	e.g. daggers, axes
Other (O)	Miscellaneous other items	e.g. debitage, unidentified fragmentary artefacts

Table 56. Broad functional categories used in the analysis of contexts and assemblages from Tell Jerablus Tahtani.

	OCCUPATION DEPOSIT	FILL	GENERAL LAYER	POT SPREAD	FLOOR	HEARTH/OVEN	BENCH/PLATFORM	WALL	ENTRANCE	TOTALS
LEVEL 4.1	-	13	11	1	-	-	-	2	1	28
LEVEL 4.2 (4R)	1	14	53	-	-	-	1	4	-	73
LEVEL 5	1	45	3	-	4	5	1	2	1	62
TOTAL	2	72	67	1	4	5	2	8	2	163

Table 57. Occurrence of small finds from Jerablus, Area I contexts (all phases).

	Complete		Broken		Total	
Functional Category	No.	%	No.	%	No.	%
Personal ornament	-	-	1	100	1	3.6
Heavy processing	1	33.3	2	66.7	3	10.7
Textile production	6	54.5	5	45.5	11	39.3
Containing	2	33.3	4	66.7	6	21.4
Ideology/ritual	-	-	1	100	1	3.6
Other	3	50	3	50	6	21.4
Total	12	42.9	16	57.1	28	100

Table 58. Occurrence of artefacts from Jerablus, Area I, Level 4.1, by broad functional category and condition.

	Complete		Broken		Total	
Material	No.	%	No.	%	No.	%
Clay	-	-	2	100	2	7.1
Pottery	8	57.1	6	42.9	14	50
Stone	4	66.7	5	33.3	9	34.2
Metal	-	-	2	100	2	7.1
Other	-	-	1	100	1	3.6
Total	12	42.9	16	57.1	28	100

Table 59. Occurrence of artefacts recovered from Jerablus, Area I, Level 4.1, by material and condition.

	Complete		Broken		Total	
Functional Category	No.	%	No.	%	No.	%
Storage/administration	1	25	3	75	4	5.5
Personal ornament	9	64.3	5	35.7	14	19.2
Heavy processing	2	40	3	60	5	6.8
Textile production	16	64	9	36	25	34.2
Containing	1	10	9	90	10	13.7
Ideology/ritual	1	50	1	50	2	2.7
Other	2	15.4	11	84.6	13	17.9
Total	32	43.8	41	56.2	73	100

Table 60. Occurrence of artefacts from Jerablus, Area I, Level 4.2 (4R), by broad functional category and condition.

	Complete		Broken		Total	
Material	No.	%	No.	%	No.	%
Clay	-		2	100	2	2.7
Pottery	16	48.5	17	51.5	33	45.2
Stone	7	43.7	9	56.3	16	21.9
Bone	5	62.5	3	37.5	8	11
Metal	2	25	6	75	8	11
Other	2	33.3	4	66.7	6	8.2
Total	32	43.8	41	56.2	73	100

Table 61. Occurrence of artefacts recovered from Jerablus, Area I, Level 4.2 (4R), by material and condition.

Levels	< 2cm	2- 5cm	5-10cm	10-20cm	20 + cm
Level 4	-	48	24	16	12
Level 4R	2.9	41.4	38.6	14.2	2.9
Level 5	-	32.4	48.4	9.6	9.6
Average totals	2.9	40.6	37	13.3	8.2

Table 62. Percentage occurrence of measured artefacts recovered from all levels analysed from Jerablus, Area I, by longest dimension.

	Complete		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)
Curated	18	39.1	28	60.9	46	53.5
Expedient	23	57.5	17	42.5	40	46.5

Table 63. Percentage occurrence of curated and expedient artefacts from Jerablus, Area I, Level 4 (both phases), by condition.

	Complete		Broken		Total	
Functional Category	No.	%	No.	%	No.	%
Personal ornament	2	100	1	-	3	3.2
Heavy processing	2	28.8	5	71.2	7	11.3
Textile production	26	78.8	7	21.2	33	53.2
Containing	4	57.1	3	42.9	7	12.3
Ideology/ritual	1	25	3	75	4	6.5
Other	3	37.5	5	62.5	8	13.5
Total	39	62.9	23	37.1	62	100

Table 64. Occurrence of artefacts from Jerablus, Area I, Level 5, by broad functional category and condition.

	Complete		Broken		Total	
Material	No.	%	No.	%	No.	%
Clay	1	33.3	2	66.7	3	4.8
Pottery	31	75.6	10	24.4	41	66.2
Stone	5	41.7	7	58.3	12	19.4
Bone	1	33.3	2	66.7	3	4.8
Other	1	50	2	50	3	4.8
Total	39	62.9	23	37.1	62	100

Table 65. Occurrence of artefacts recovered from Jerablus, Area I, Level 5, by material and condition.

	Complete		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)
Curated	10	45.5	12	54.5	22	37.3
Expedient	30	81.1	7	18.9	37	62.7

Table 66. Percentage occurrence of curated and expedient artefacts from Jerablus, Area I, Level 5, by condition.

	Occupation Deposit	Fill	Pit Fill	General Layer	Drain	Pot Spread	Floor	Hearth/Oven	Pavement	Bench	Wall	Entrance	Building Collapse	Totals
LEVEL 4	3	13		27	25		4				22	1	3	98
LEVEL 7	4	5	2	1		2	1	1		1	5			22
LEVEL 8	3		10											13
LEVEL 9	9								2					11
LEVEL 10	5		10											15
LEVEL 11	7		1	34		6	1							49
LEVEL 12						24	15		4		1			45
LEVEL 13/14	1		16	9										26
TOTAL	32	18	39	71	25	22	24	1	6	1	28	1	3	27

Table 67. Occurrence of small finds from Jerablus, Area III contexts (all levels).

	Complete		Broken		Total	
Functional Category	No.	%	No.	%	No.	%
Storage/administration	-	-	5	100	5	5.1
Personal ornament	3	37.5	5	62.5	8	8.2
Heavy processing	6	28.6	15	71.4	21	21.4
Textile production	15	60	10	40	25	25.5
Containing	10	90.9	1	9.1	11	11.2
Ideology/ritual	-	-	2	100	2	2.1
Other	22	84.6	4	15.4	26	26.5
Total	56	57.1	42	42.9	98	100

Table 68. Occurrence of artefacts from Jerablus, Area III, Level 4, by broad functional category and condition.

	Complete		Broken		Total	
Material	No.	%	No.	%	No.	%
Clay	15	75	5	25	20	20.4
Pottery	27	69.2	12	30.8	39	39.8
Stone	15	44.1	19	55.9	34	34.7
Bone	-	-	2	100	2	2
Metal	1	33.3	2	66.7	3	3.1
Total	58	59.2	40	40.8	98	100

Table 69. Occurrence of artefacts recovered from Jerablus, Area III, Level 4, by material and condition.

LEVELS	< 2CM	2- 5CM	5-10CM	10-20CM	20 + CM
Level 4	3.4	34.8	37.1	18	6.7
Level 7	-	22.2	38.9	27.8	11.1
Level 8	7.8	23	30.7	30.8	7.9
Level 9	-	27.3	63.6	9.1	-
Level 10	-	46.7	40	13.3	-
Level 11	33.3	22.2	18.5	24.1	1.9
Level 12	17.9	15.4	7.7	38.5	20.5
Level 13	55.6	22.2	22.2	-	-
Average totals	23.6	26.7	32.4	22.9	9.6

Table 70. Percentage occurrence of measured artefacts recovered from Jerablus, Area III (all levels) by longest dimension.

	Complete		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)
Curated	21	43.7	27	56.3	48	61.5
Expedient	20	66.7	10	33.3	30	38.5

Table 71. Percentage occurrence of curated and expedient artefacts from Jerablus, Area III, Level 4, by condition.

	Complete		Broken		Total	
Functional Category	No.	%	No.	%	No.	%
Heavy processing	3	60	2	40	5	22.7
Textile production	3	75	1	25	4	18.2
Containing	1	14.3	6	85.7	7	31.8
Other	-	-	6	100	6	27.3
Total	7	31.8	15	68.2	22	100

Table 72. Occurrence of artefacts from Jerablus, Area III, Level 7, by broad functional category and condition.

	Complete		Broken		Total	
Material	No.	%	No.	%	No.	%
Pottery	2	20	8	80	10	45.5
Stone	4	44.4	5	55.6	9	40.9
Bone	1	50	1	50	2	9.1
Metal	-	-	1	100	1	4.5
Total	7	31.8	13	68.2	22	100

Table 73. Occurrence of artefacts recovered from Jerablus, Area III, Level 7, by material and condition.

	Complete		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)
Curated	4	30.8	9	69.2	13	65
Expedient	4	57.1	3	42.9	7	35

Table 74. Percentage occurrence of curated and expedient artefacts from Jerablus, Area III, Level 7, by condition.

	Complete		Broken		Total	
Functional Category	No.	%	No.	%	No.	%
Personal ornament	1	100	-	-	1	7.7
Heavy processing	1	100	-	-	1	7.7
Textile production	3	60	2	40	5	38.45
Containing	1	100	-	-	1	7.7
Other	3	60	2	40	5	38.45
Total	9	69.2	4	30.8	13	100

Table 75. Occurrence of artefacts from Jerablus, Area III, Level 8, by broad functional category and condition.

	Complete		Broken		Total	
Material	No.	%	No.	%	No.	%
Pottery	7	77.8	2	22.2	9	56.3
Stone	5	100	-	-	5	31.2
Bone	-	-	2	100	2	12.5
Total	12	75	4	25	16	100

Table 76. Occurrence of artefacts recovered from Jerablus, Area III, Level 8, by material and condition.

	Complete		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)
Curated	1	20	4	80	6	46.2
Expedient	4	50	4	50	7	53.8

Table 77. Percentage occurrence of curated and expedient artefacts from Jerablus, Area III, Level 8, by condition.

	Complete		Broken		Total	
Functional Category	No.	%	No.	%	No.	%
Personal ornament	-	-	1	100	1	9.1
Heavy processing	2	100	-	-	2	18.2
Textile production	1	16.7	5	83.3	6	54.5
Containing	1	100	-	-	1	9.1
Other	-	-	1	100	1	9.1
Total	4	26.4	7	63.6	11	100

Table 78. Occurrence of artefacts from Jerablus, Area III, Level 9, by broad functional category and condition.

	Complete		Broken		Total	
Material	No.	%	No.	%	No.	%
Pottery	2	28.6	5	71.4	7	63.6
Stone	2	100	-	-	2	13.2
Bone	-	-	2	100	2	13.2
Total	4	36.4	7	63.6	11	100

Table 79. Occurrence of artefacts recovered from Jerablus, Area III, Level 9, by material and condition.

	Complete		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)
Curated	-	-	5	100	5	45.5
Expedient	1	16.7	5	83.3	6	54.5

Table 80. Percentage occurrence of curated and expedient artefacts from Jerablus, Area III, Level 9 by condition.

	Complete		Broken		Total	
Functional Category	No.	%	No.	%	No.	%
Textile production	4	44.4	5	55.6	9	60
Containing	-	-	2	100	2	13.3
Other	3	75	1	25	4	26.7
Total	7	46.7	8	53.3	15	100

Table 81. Occurrence of artefacts from Jerablus, Area III, Level 10, by broad functional category and condition.

	Complete		Broken		Total	
Material	No.	%	No.	%	No.	%
Pottery	6	54.5	5	45.5	11	73.3
Stone	-	-	3	100	3	20
Metal	1	100	-	-	1	6.7
Total	7	46.7	8	53.3	15	100

Table 82. Occurrence of artefacts recovered from Jerablus, Area III, Level 10, by material and condition.

	Complete		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)
Curated	3	50	3	50	6	42.9
Expedient	4	50	4	50	8	57.1

Table 83 Percentage occurrence of curated and expedient artefacts from Jerablus, Area III, Level 10, by condition.

	Complete		Broken		Total	
Functional Category	No.	%	No.	%	No.	%
Storage/administration	-	-	3	100	3	6.1
Personal ornament	17	100	-	-	17	34.7
Heavy processing	-	-	1	100	1	2
Textile production	2	40	3	60	5	10.2
Containing	13	68.4	6	31.6	19	38.8
Other	3	75	1	25	4	8.2
Total	35	71.4	14	28.6	49	100

Table 84. Occurrence of artefacts from Jerablus, Area III, Level 11, by broad functional category and condition.

	Complete		Broken		Total	
Material	No.	%	No.	%	No.	%
Clay	3	60	2	40	5	10.2
Pottery	16	69.6	7	30.4	23	46.9
Stone	14	77.8	4	22.2	18	36.8
Bone	1	100	-	-	1	2
Metal	1	50	1	50	2	4.1
Total	35	71.4	14	28.6	49	100

Table 85. Occurrence of artefacts recovered from Jerablus, Area III, Level 11, by material and condition.

	Complete		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)
Curated	28	87.5	4	12.5	32	60.4
Expedient	12	57.1	9	42.9	21	39.6

Table 86. Percentage occurrence of curated and expedient artefacts from Jerablus, Area III, Level 11, by condition.

	Complete		Broken		Total	
Functional Category	No.	%	No.	%	No.	%
Personal ornament	9	90	1	10	10	22.7
Heavy processing	1	25	3	75	4	9.1
Textile production	2	66.7	1	33.3	3	6.8
Containing	22	100	-	-	22	50
Other	-	-	5	100	5	11.4
Total	34	75.6	10	24.4	44	100

Table 87. Occurrence of artefacts from Jerablus, Area III, Level 12, by broad functional category and condition.

	Complete		Broken		Total	
Material	No.	%	No.	%	No.	%
Clay	-	-	1	100	1	2.3
Pottery	24	92.3	2	7.7	26	59.1
Stone	10	62.5	6	27.5	16	36.4
Bone	-	-	1	100	1	2.3
Total	34	75.6	10	24.4	44	100

Table 88. Occurrence of artefacts recovered from Jerablus, Area III, Level 12, by material and condition.

	Complete		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)
Curated	33	91.7	3	8.3	36	85.7
Expedient	4	66.7	2	33.3	6	14.3

Table 89. Percentage occurrence of curated and expedient artefacts from Jerablus, Area III, Level 12, by condition.

	Complete		Broken		Total	
Functional Category	No.	%	No.	%	No.	%
Storage/administration	-	-	5	100	5	19.2
Personal ornament	11	100	-	-	11	42.3
Textile production	1	25	3	75	4	15.4
Containing	1	50	1	50	2	7.7
Other	2	50	2	50	4	15.4
Total	15	57.7	11	42.3	26	100

Table 90. Occurrence of artefacts from Jerablus, Area III, Level 13, by broad functional category and condition.

	Complete		Broken		Total	
Material	No.	%	No.	%	No.	%
Clay	-	-	5	100	5	19.2
Pottery	1	33.3	2	66.7	3	11.6
Stone	13	81.3	3	18.7	16	61.5
Other	1	50	1	50	2	7.7
Total	15	57.7	11	42.3	26	100

Table 91. Occurrence of artefacts recovered from Jerablus, Area III, Level 13, by material and condition.

	Complete		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)
Curated	3	23.1	10	76.9	13	59.1
Expedient	6	66.7	3	33.3	9	40.9

Table 92. Percentage occurrence of curated and expedient artefacts from Jerablus, Area III, Level 13/14, by condition.

	OCCUPATION DEPOSIT	FILL	PIT FILL	GENERAL LAYER	POT SPREAD	FLOOR	DRAIN	HEARTH	PASSAGE WAY	PAVEMENT	BENCH	WALL	ENTRANCE	BUILDING COLLAPSE	OTHER	TOTALS
LEVEL 4																
I	-	-	1	11	-	5	-	-	20	3	1	24	-	-	-	64
II	1	8	-	-	-	1	-	-	-	-	-	25	-	7	1	44
LEVEL 5																
I	-	17	-	5	-	-	3	-	-	-	-	11	1	-	-	37
II	-	25	-	8	-	8	-	2	-	-	I	2	-	-	-	46
III	-	2	-	5	-	-	-	-	-	7	1	2	-	-	-	17
LEVEL 6	-	5	15	9	-	5	-	-	-	6	-	8	-	-	-	48
LEVEL 7																
I	2	15	-	4	-	1	-	-	-	-	-	6	-	-	-	29
II	1	12	-	-	-	2	-	-	-	-	-	3	-	-	-	18
II	-	12	1	4	1	-	-	-	-	-	-	2	-	-	-	17
TOTAL	4	96	17	46	1	22	3	2	20	16	3	83	1	7	1	320

Table 93: Occurrence of registered small finds from Jerablus, Area IV contexts (all levels).

	Complete		Broken		Total	
Functional Category	No.	%	No.	%	No.	%
Heavy processing	2	4.5	42	95.5	44	68.75
Textile production	3	50	3	50	6	9.4
Containing	1	50	1	50	2	3.1
Other	5	41.7	7	58.3	12	18.75
Total	11	17.2	53	82.8	64	100

Table 94. Occurrence of artefacts from Jerablus, Area IV, Level 4.1, by broad functional category and condition.

	Complete		Broken		Total	
Material	No.	%	No.	%	No.	%
Pottery	4	44.4	5	55.6	9	13.9
Stone	7	16.4	48	83.6	55	84.6
Total	11	17.2	53	82.8	64	100

Table 95. Occurrence of artefacts recovered from Jerablus, Area IV, Level 4.1, by material and condition.

	Complete		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)
Curated	1	3.4	41	97.6	42	67.7
Expedient	9	45	11	55	20	32.3

Table 96. Percentage occurrence of curated and expedient artefacts from Jerablus, Area IV, Level 4.1, by condition.

	Complete		Broken		Total	
Functional Category	No.	%	No.	%	No.	%
Personal ornament	1	33.3	2	66.7	3	6.8
Heavy processing	6	19.4	25	80.6	31	70.5
Textile production	2	100	-	-	2	4.5
Containing	-	-	2	100	2	4.5
Other	5	83.3	1	16.7	6	13.7
Total	14	31.8	30	68.2	44	100

Table 97. Occurrence of artefacts from Jerablus, Area IV, Level 4.2, by broad functional category and condition.

	Complete		Broken		Total	
Material	No.	%	No.	%	No.	%
Pottery	2	50	2	50	4	9.1
Stone	11	29.7	26	70.3	37	84.1
Metal	1	100	1	-	2	4.5
Other	-	-	1	100	1	2.3
Total	19	31.8	25	68.2	44	100

Table 98. Occurrence of artefacts recovered from Jerablus, Area IV, Level 4.2, by material and condition.

	Complete		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)
Curated	5	13.9	31	86.1	36	81.8
Expedient	8	100	-		8	18.2

Table 99. Percentage occurrence of curated and expedient artefacts from Jerablus, Area IV, Level 4.2, by condition.

Levels	< 2cm	2- 5cm	5-10cm	10-20cm	20 + cm
Level 4 (phase 1 & 2)	1.1	2.3	10.4	49.4	36.8
Level 5 (phases 1, 2 & 3)	3.1	28.1	31.3	19.8	17.7
Level 6	4.3	14.8	46.8	21.3	12.8
Level 7 (phases 1, 2 & 3)	1.5	15.4	38.5	26.2	18.4
Average totals	2.5	15.2	31.8	29.2	21.4

Table 100. Percentage occurrences of measured artefacts from Jerablus, Area IV, by longest dimension

	Complete		Broken		Total	
Functional Category	No.	%	No.	%	No.	%
Personal ornament	2	66.7	1	33.3	3	5.7
Heavy processing	6	16.7	30	83.3	36	67.8
Textile production	3	100	-	-	3	5.7
Containing	1	50	1	50	2	3.8
Other	5	55.6	4	44.4	9	17
Total	17	32.1	36	67.9	53	100

Table 101. Occurrence of artefacts from Jerablus, Area IV, Level 4, Building 1000, phases 1 and 2 (and collapse), by broad functional category and condition.

Functional Category	No.	%	No.	%	No.	%
Personal ornament	2	40	3	60	5	13.5
Heavy processing	4	40	6	60	10	27
Textile production	10	62.5	6	37.5	16	43.3
Containing	-	-	1	100	1	2.7
Other	3	60	2	40	5	13.5
Total	19	51.4	18	48.6	37	100

Table 102. Occurrence of artefacts from Jerablus, Area IV, Level 5.1, by broad functional category and condition.

	Complete		Broken		Total	
Material	No.	%	No.	%	No.	%
Pottery	11	66.7	7	33.3	18	48.5
Stone	7	50	7	50	14	37.8
Metal	-	-	4	100	4	10.8
Bone	1	100	-	-	1	2.7
Total	19	43.2	18	56.8	37	100

Table 103. Occurrence of artefacts recovered from Jerablus-Tahtani Area IV, Level 5.1, by material and condition.

	Complete		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)
Curated	6	37.5	10	62.5	16	54.3
Expedient	11	57.9	8	42.1	19	45.7

Table 104. Percentage occurrence of curated and expedient artefacts from Jerablus, Area IV, Level 5.1, by condition.

	Complete		Broken		Total	
Functional Category	No.	%	No.	%	No.	%
Storage/administration	-	-	3	100	3	6.8
Personal ornament	3	100	-	-	3	6.8
Heavy processing	3	42.9	4	57.1	7	15.9
Textile production	7	30.4	16	69.6	23	52.3
Containing	1	50	1	50	2	4.5
Ideology/ritual	-	-	1	100	1	2.3
Other	2	40	3	60	5	11.4
Total	16	36.4	28	63.6	44	100

Table 105. Occurrence of artefacts from Jerablus, Area IV, Level 5.2, by broad functional category and condition.

	Complete		Broken		Total	
Material	No.	%	No.	%	No.	%
Pottery	7	25.9	20	74.1	27	61.4
Stone	8	57.1	6	42.9	14	31.8
Metal	1	100	-	-	1	2.3
Clay	-	-	2	100	2	4.5
Total	16	36.4	28	63.6	44	100

Table 106. Occurrence of artefacts recovered from Jerablus, Area IV, Level 5.2, by material and condition.

	Complete		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)
Curated	8	47.1	9	52.9	17	37.8
Expedient	9	32.1	19	67.9	28	62.2

Table 107. Percentage occurrence of curated and expedient artefacts from Jerablus, Area IV, Level 5.2 by condition.

	Complete		Broken		Total	
Functional Category	No.	%	No.	%	No.	%
Personal ornament	2	100	-	-	2	10.5
Heavy processing	3	25	9	75	12	63.2
Textile production	1	50	1	50	2	10.5
Ideology/ritual	-	-	1	100	1	5.3
Other	-	-	2	100	2	10.5
Total	6	42.1	11	57.9	19	100

Table 108. Occurrence of artefacts from Jerablus, Area IV, Level 5.3, by broad functional category and condition.

	Complete		Broken		Total	
Material	No.	%	No.	%	No.	%
Pottery	1	25	3	75	4	21.1
Stone	5	33.3	10	66.7	15	78.9
Total	6	42.1	11	57.9	19	100

Table 109. Occurrence of artefacts recovered from Jerablus, Area IV, Level 5.3, by material and condition.

	Complete		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)
Curated	5	35.7	9	64.3	14	87.5
Expedient	1	50	1	50	2	12.5

Table 110. Percentage occurrence of curated and expedient artefacts from Jerablus, Area IV, Level 5.3, by condition.

	Complete		Broken		Total	
Functional Category	No.	%	No.	%	No.	%
Storage/administration	-	-	4	100	4	8.3
Personal ornament	1	100	-	-	1	2.1
Heavy processing	1	6.7	14	93.3	15	31.25
Textile production	13	76.5	4	23.5	17	35.4
Ideology/ritual	-	-	2	100	2	4.2
Other	5	55.6	4	44.4	9	18.75
Total	20	41.7	28	58.3	48	100

Table 111. Occurrence of artefacts from Jerablus, Area IV, Level 6, by broad functional category and condition.

	Complete		Broken		Total	
Material	No.	%	No.	%	No.	%
Pottery	15	62.5	9	37.5	24	50
Stone	5	25	15	75	20	41.7
Clay	-	-	3	100	3	6.2
Other	-	-	1	100	1	2.1
Total	20	41.7	28	58.3	48	100

Table 112. Occurrence of artefacts recovered from Jerablus, Area IV, Level 6, by material and condition.

	Complete		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)
Curated	11	50	11	50	22	51.2
Expedient	13	61.9	8	38.1	21	48.8

Table 113. Percentage occurrence of curated and expedient artefacts from Jerablus, Area IV, Level 6, by condition.

	Complete		Broken		Total	
Functional Category	No.	%	No.	%	No.	%
Personal ornament	-	-	1	100	1	3.4
Heavy processing	1	12.5	7	87.5	8	27.6
Textile production	4	57.1	3	42.9	7	24.1
Containing	1	50	1	50	2	6.9
Other	10	90.9	1	9.1	11	38
Total	16	55.2	13	44.8	29	100

Table 114. Occurrence of artefacts from Jerablus, Area IV, Level 7.1, by broad functional category and condition.

	Complete		Broken		Total	
Material	No.	%	No.	%	No.	%
Pottery	8	88.9	1	11.1	9	31
Stone	10	50	10	50	20	69
Total	18	62.1	11	37.9	29	100

Table 115. Occurrence of artefacts recovered from Jerablus, Area IV, Level 7.1, by material and condition.

	Complete		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)
Curated	3	27.3	8	72.7	11	40.7
Expedient	11	68.8	5	31.2	16	59.3

Table 116. Percentage occurrence of curated and expedient artefacts from Jerablus, Area IV, Level 7.1, by condition.

	Complete		Broken		Total	
Functional Category	No.	%	No.	%	No.	%
Storage/administration	-	-	1	100	1	5.6
Weaponry	1	100	-	-	1	5.6
Heavy processing	1	20	4	80	5	27.8
Textile production	2	50	2	50	4	22.2
Containing	1	50	1	50	2	11.1
Other	1	20	4	80	5	27.8
Total	6	33.3	12	66.7	18	100

Table 117. Occurrence of artefacts from Jerablus, Area IV, Level 7.2, by broad functional category and condition.

	Complete		Broken		Total	
Material	No.	%	No.	%	No.	%
Pottery	4	88.9	5	11.1	9	50
Stone	2	25	6	75	8	44.4
Metal	-	-	1	100	1	5.6
Total	6	33.3	12	66.7	18	100

Table 118. Occurrence of artefacts recovered from Jerablus, Area IV, Level 7.2, by material and condition.

	Complete		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)
Curated	7	77.8	2	22.2	9	52.9
Expedient	4	50	4	50	8	47.1

Table 119. Percentage occurrence of curated and expedient artefacts from Jerablus, Area IV, Level 7.2, by condition.

	Complete		Broken		Total	
Functional Category	No.	%	No.	%	No.	%
Personal ornament	-	-	1	100	1	5
Heavy processing	1	33.3	2	66.7	3	15
Textile production	7	70	3	30	10	50
Containing	1	100	-	-	1	5
Ideology/ritual	-	-	1	100	1	5
Other	2	50	2	50	4	20
Total	11	55	9	45	20	100

Table 120. Occurrence of artefacts from Jerablus, Area IV, Level 7.3, by broad functional category and condition.

	Complete		Broken		Total	
Material	No.	%	No.	%	No.	%
Pottery	6	60	4	40	10	50
Stone	4	50	4	40	8	40
Metal	1	100	-	-	1	5
Bone	-	-	1	100	1	5
Total	11	55	9	45	20	100

Table 121. Occurrence of artefacts recovered from Jerablus, Area IV, Level 7.3, by material and condition.

	Complete		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)
Curated	5	62.5	3	37.5	8	44.4
Expedient	6	60	4	40	10	55.6

Table 122. Percentage occurrence of curated and expedient artefacts from Jerablus, Area IV, Level 7.3, by condition.

Tombs	Personal Ornament	Weaponry	Heavy Processing	Cutting tools	Textile Production	Containing	Ideology/ritual	Other	Totals
956	5	-	-	-	-	5	-	-	10
1036	27	2	-	-	-	5	5	2	41
1410	-	-	-	-	-	2	-	-	2
1518	23	-	-	-	-	20	-	1	44
1670	23	-	-	-	-	39	-	-	62
1687	31	-	-	-	-	26	-		57
1850	2	-	-	-	-	3	-	-	5
1856	-	-	-	-	-	5	-	-	5
1931	41	-	-	-	-	-	-	-	41
Totals	152	2	-	-	-	115	5	3	267

Table 123. Showing occurrence of finds from Jerablus, Area IV, Level 4 graves, by broad functional category

Tombs	Personal Ornament	Weaponry	Heavy Processing	Cutting tools	Textile Production	Containing	Ideology/ritual	Other	Totals
787	87	-	5	1	5	11	-	3	112
1320	-	-	-	-	-	-	-	-	0
1342	-	-	-	-	-	-	-	-	0
1362	-	-	-	-	-	1	-	-	1
1367	17	-	2	-	-	5	-	-	24
1369	29	-	-	-	-	3	-	-	32
1480	-	-	-	-	-	1	-	-	1
1481	-	-	-	-	-	1	-	-	1
1482	1	-	1	-	-	19	-	1	22
1487	2	-	-	-	-	2	-	1	5
1575	-	-	-	-	-	-	-	-	0
1583	40	-	-	-	-	18	-	-	58
1703	7	1	-	-	-	3	-	1	11
1709	-	-	-	-	-	-	-	-	0
Totals	183	1	8	1	5	64	0	6	267

Table 124. Showing occurrence of finds from Jerablus, Area IV, Level 5 graves, by broad functional category

Tombs	Personal Ornament	Weaponry	Heavy Processing	Cutting tools	Textile Production	Containing	Ideology/Ritual	Other	Totals
1885	3	-	1	-	-	4	-	-	8
2523	-	-	-	-	-	-	-	-	0
2541	-	-	-	-	-	-	-	-	0
Totals	3	-	1	-	-	4	-	-	8

Table 125. Showing occurrence of finds from Jerablus, Area IV, Level 6 graves, by broad functional category

		Area I			Area III								Area IV						
	Level	4.1	4.2	5	4	7	8	9	10	11	12	13	4.1	4.2	5.1	5.2	5.3	6	7
Area I	4.1	-	78.1	83.8	73.3	70	78	74.4	78.3	44.5	51.4	41.9	41.2	36.5	71.5	73.1	38.2	70.2	76.2
	4.2	78.1	-	70.9	73.9	56.2	78.7	67.7	63.2	60.9	58.5	63.8	40	35.1	70.7	70.6	38.5	76.9	68.9
	5	83.8	70.9	-	63.9	56.3	70.4	86	72.8	34.7	48.3	40.6	40.5	38.1	75.4	86.4	42.7	68.7	72
Area III	4	73.3	73.9	63.9	-	68.2	75.1	75.1	63.6	44.9	46.7	52.3	48	50.7	57.3	71.3	52.8	69	85.7
	7	70	56.2	56.3	68.2	-	60.9	54.6	58.2	52.2	59.1	38.5	54	40.3	73.7	50	46.2	65.2	75.1
	8	78	78.7	70.4	75.1	60.9	-	70.4	73.4	36	41.3	46.2	39	37.3	70.1	68.9	36.9	65.1	82
	9	74.4	67.7	86	75.1	54.6	70.4	-	72.7	33.6	43.2	36.3	34.4	42.6	81.9	88.1	52.9	69.3	72.5
	10	78.3	63.2	72.8	63.6	58.2	73.4	72.7	-	47.7	27.5	38.5	26.8	18.2	55	63.8	16.5	59.7	63.6
	11	44.5	60.9	34.7	44.9	52.2	36	33.6	47.7	-	78.5	66.9	21.7	26	36.7	37.9	30.9	33.6	31.7
	12	51.4	58.5	48.3	46.7	59.1	41.3	43.2	27.5	78.5	-	48.7	31.9	26.5	43.6	34	39.4	32.9	36.7
	13	41.9	63.8	40.6	52.3	38.5	46.2	36.3	38.5	66.9	48.7	-	27.9	42.6	46.7	39.9	26.5	46.2	42.1
Area IV	4.1	41.2	40	40.5	48	54	39	34.4	26.8	21.7	31.9	27.9	-	94.6	53.6	40.8	83.1	59.4	54.2
	4.2	36.5	35.1	38.1	50.7	40.3	37.3	42.6	18.2	26	26.5	42.6	94.6	-	54.5	39.7	85	56.6	43.6
	5.1	71.5	70.7	75.4	57.3	73.7	70.1	81.9	55	36.7	43.6	46.7	53.6	54.5	-	80	58.3	73	80.8
	5.2	73.1	70.6	86.4	71.3	50	68.9	88.1	63.8	37.9	34	39.9	40.8	39.7	80	-	46.5	73.9	67.6
	5.3	38.2	38.5	42.7	52.8	46.2	36.9	52.9	16.5	30.9	39.4	26.5	83.1	85	58.3	46.5	-	58.6	50.3
	6	70.2	76.9	68.7	69	65.2	65.1	69.3	59.7	33.6	32.9	46.2	59.4	56.6	73	73.9	58.6	-	82.2
	7	76.2	68.9	72	85.7	75.1	82	72.5	63.6	31.7	36.7	42.1	54.2	43.6	80.8	67.6	50.3	82.2	-

Table 126. Results of Robinson's coefficient of similarity for Jerablus, all Areas and levels.

FUNCTIONAL CATEGORY	DESCRIPTION	ARTEFACT CLASSES
Personal ornament (PO)	Objects (of bone, stone and shell) associated with personal ornament.	e.g. beads and pendants
Heavy processing (HP)	Objects (of stone) associated with grinding, pounding and hammering.	e.g. querns, rubbers, hammerstones, grinders, rubbing stones, pestles, mortars
Cutting tools (CT)	Objects (of stone) associated with cutting/carving.	e.g. axes, adzes, chisels
Containing (C)	Objects (of stone and pottery) associated containing.	e.g. vessels, stoppers, lids
Ideology/ritual (I/R	Objects (of stone and pottery) commonly associated with symbolic activities.	e.g. figurines, maceheads etc.
Other (O)	Miscellaneous objects	e.g. artefacts that are unidentifiable by virtue of their fragmentary/damaged condition

Table 127. Summary of the broad functional categories used in analysis of assemblages from Kissonerga-Mylouthkia.

Functional Category	No.	%	No.	%	No.	%
Personal Ornament	-	-	1	100	1	4.8
Heavy processing	6	46.2	7	53.8	13	61.9
Containing	-	-	3	100	3	14.2
Other	-	-	4	100	4	19
Total	6	28.6	15	71.4	21	100

Table 128. Occurrence of artefacts recovered from Mylouthkia, Building 152, by broad functional category and condition.

	Complete		Broken		Total	
Material	No.	%	No.	%	No.	%
Pottery	3*	100	-	-	3	14.2
Stone	6	42.9	8	57.1	14	66.8
Antler	-	-	4	100	4	19
Total	9	50	9	50	21	100

Table 129. Occurrence of artefacts recovered from Mylouthkia, Building 152, by material and condition.

CONTEXT	< 2CM	2-5CM	5-10CM	10-20CM	>20CM
B152	4.8	14.3	9.5	47.6	23.8
B200	10.3	16.9	31.6	32.2	9
B200, Phase 1	3.9	15.7	52.9	25.5	2
B200, Phase 2	10.7	21.4	46.5	21.4	-
B200, Phase 3	11	15.1	24.2	37.4	12.3
B200, Phase 4	12.5	37.5	29.2	20.8	-
Pit 1	2.6	37.2	39.9	17.7	2.6
Pit 1, Phase 3	-	33.3	45.2	21.5	-
Pit 1, Phase 4	1.6	37.1	41.9	16.1	3.3
Pit 1, Phase 5	7.5	40	35	17.5	-
Pit 16	3.9	26.8	43.7	22.5	3.1
Pit 16, Phase 2	13	56.5	26.1	-	4.8
Pit 16, Phase 3	2.2	22.2	49.6	25.2	0.8
Pit 16, Phase 4	2.7	19.9	49.5	25.2	2.7
Pit 24/28	-	22.9	60	17.1	-
Pit 100	-	25	36.1	36.1	2.8
Ditch 105	3.1	9.4	53.1	32.8	1.6
Ditch 106	-	-	50	33.3	16.7
Ditch 107	-	8.2	55.1	24.5	12.2
Pit 108	-	11.5	60.9	26.4	1.2
Pit 109	-	6.6	48.8	42.1	2.5

Table 130. Percentage occurrence of artefacts from Mylouthkia (all contexts), by longest dimension

	Complete		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)
Curated	2	18.2	9	81.8	11	61.1
Expedient	4	57.1	3	42.9	7	38.9

Table 131. Percentage occurrence of curated and expedient artefacts from Mylouthkia, Building 152, by condition.

PHASE	DESCRIPTION
1	initial *construction* phase, including south facing entrance. Series of pits cut into floor, one for mortar/basin emplacement.
2	first *occupation* phase of, original door blocked and new one cut. Walls re-rendered. Laminated deposits on floor containing artefacts. Central hearth. Series of postholes across building. Pit installations in north.
3	final *occupation* phase. Floor directly above 2. Building interior densely packed with fixtures and artefacts. Sub-adult skeleton. Series of water laid laminated silty deposits indicative of exposure to the elements in western half of building.
4	*destruction* and *collapse* phase, the gradual erosion of the upstanding structure and finally the complete disintegration of the unprotected upper part of the walls. Sealed by natural erosion processes depositing fairly sterile, compact silty brown deposits and surfaces over the building.

Table 132. Main phases of activity in Mylouthkia, Building 200.

PHASE	QUERNS/RUBBERS ETC.	CUTTING TOOLS	BEADS/PENDANTS	AWL/NEEDLE	PERFORATED DISC	SPINDLE WHORL	FIGURINE	LID/STOPPER	POTTERY VESSEL	STONE VESSEL	OTHER
1	*	*	*	*	-	-	-	-	-	*	*
2	*	*	*	-	-	-	-	-	*	*	*
3	*	*	*	*	-	-	-	-	*	*	*
4	*	*	*	-	-	-	-	-	-	*	*
Total	*	*	*	*	-	-	-	-	*	*	*

Table 133. Presence/absence of certain artefact types by phase recovered from Mylouthkia, Building 200.

	Complete		Broken		Total	
Functional Category	No.	%	No.	%	No.	%
Personal ornament	9	28.1	28	71.9	37	10.9
Heavy processing	91	72.2	35	27.8	126	37.3
Cutting tools	35	67.3	17	32.7	52	15.4
Textile production	2	7.1	26	92.9	28	8.3
Containing	53	72.6	20	27.4	73	21.6
Other	11	50	11	50	22	6.5
Total	201	59.5	137	40.5	338	100

Table 134. Occurrence of artefacts recovered from Mylouthkia, Building 200, by broad functional category and condition.

	Complete		Broken		Total	
Material	No.	%	No.	%	No.	%
Pottery	33	91.7	3	8.3	36	10.7
Stone	152	65.8	79	34.2	231	68.3
Bone	4	13.3	26	86.7	30	8.9
Antler	9	50	9	50	18	5.3
Shell	3	14.6	19	86.4	22	6.5
Total	201	59.5	137	40.5	338	100

Table 135. Occurrence of artefacts recovered from Mylouthkia, Building 200, by material and condition.

	Complete		Broken		Total	
Functional Category	No.	%	No.	%	No.	%
Personal ornament	1	100	-	-	1	1.9
Heavy processing	23	74.2	8	25.8	31	59.7
Cutting tools	1	25	3	75	4	7.7
Textile production	-	-	1	100	1	1.9
Containing	2	20	8	80	10	19.2
Other	1	20	4	80	5	9.6
Total	28	53.8	26	46.2	52	100

Table 136. Occurrence of artefacts recovered from Mylouthkia, Building 200, phase 1, by broad functional category and condition.

	Complete		Broken		Total	
Material	No.	%	No.	%	No.	%
Pottery	-	-	2	100	2	3.8
Stone	26	55.3	21	44.7	47	90.3
Bone	-	-	1	100	1	1.9
Shell	2	100	-	-	2	3.8
Total	28	53.8	26	46.2	52	100

Table 137. Occurrence of artefacts recovered from Mylouthkia, Building 200, Phase 1, by material and condition.

	Complete		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)
Curated	6	31.6	13	68.4	19	38.8
Expedient	21	70	9	30	30	61.2

Table 138. Percentage occurrence of curated and expedient artefacts from Mylouthkia, Building 200, phase 1, by condition.

	Complete		Broken		Total	
Functional Category	No.	%	No.	%	No.	%
Personal ornament	-	-	3	100	3	10
Heavy processing	11	61.1	7	38.9	18	60
Cutting tools	1	50	1	50	2	6.7
Containing	-	-	4	100	4	13.3
Other	1	33.3	2	66.7	3	10
Total	13	43.3	17	56.7	30	100

Table 139. Occurrence of artefacts recovered from Mylouthkia, Building 200, phase 2, by broad functional category and condition.

	Complete		Broken		Total	
Material	No.	%	No.	%	No.	%
Stone	12	46.2	14	53.8	26	86.7
Bone	1	100	-	-	1	3.3
Shell	-	-	3	100	3	10
Total	13	43.3	17	57.7	30	100

Table 140. Occurrence of artefacts recovered from Mylouthkia, Building 200, phase 2, by material and condition.

	Complete		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)
Curated	3	18.7	13	81.3	16	53.3
Expedient	10	83.3	2	16.7	14	46.7

Table 141. Percentage occurrence of curated and expedient artefacts from Mylouthkia, Building 200, phase 2, by condition.

	Complete		Broken		Total	
Functional Category	No.	%	No.	%	No.	%
Personal ornament	7	25	21	75	28	12.1
Heavy processing	54	78.3	15	21.7	69	29.9
Cutting tools	31	72.1	12	28.9	43	18.6
Textile production	2	8.3	22	91.7	24	10.4
Containing	51	91.1	5	8.9	56	24.2
Other	6	54.5	5	45.5	11	4.8
Total	151	65.4	80	34.6	231	100

Table 142. Occurrence of artefacts recovered from Mylouthkia, Building 200, phase 3, by broad functional category and condition.

	Complete		Broken		Total	
Material	No.	%	No.	%	No.	%
Pottery	33	100	-	-	33	14.3
Stone	108	74.5	37	25.5	145	62.8
Bone	2	8.3	22	91.7	24	10.4
Antler	7	43.5	9	56.3	16	6.9
Shell	1	7.7	12	92.3	13	5.6
Total	151	65.4	80	34.6	231	100

Table 143. Occurrence of artefacts recovered from Mylouthkia, Building 200, phase 3, by material and condition.

	Complete		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)
Curated	91	58.3	65	41.7	156	69.6
Expedient	57	83.8	11	16.2	68	30.4

Table 144. Percentage occurrence of curated and expedient artefacts from Mylouthkia, Building 200, phase 3, by condition.

	Complete		Broken		Total	
Functional Category	No.	%	No.	%	No.	%
Personal ornament	1	20	4	80	5	20
Heavy processing	3	37.5	5	62.5	8	32
Cutting tools	1	33.3	2	66.7	3	12
Textile production	-	-	3	100	3	12
Containing	1	50	1	50	2	8
Other	3	75	1	25	4	16
Total	8	32	17	68	25	100

Table 145. Occurrence of artefacts recovered from Mylouthkia, Building 200, phase 4, by broad functional category and condition.

	Complete		Broken		Total	
Material	No.	%	No.	%	No.	%
Pottery	-	-	1	100	1	4
Stone	6	42.9	8	57.1	14	56
Bone	1	25	3	75	4	16
Antler	2	100	-	-	2	8
Shell	-	-	4	100	4	16
Total	8	32	17	68	25	100

Table 146. Occurrence of artefacts recovered from Mylouthkia, Building 200, phase 4, by material and condition.

	Complete		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)
Curated	2	14.3	12	85.7	14	60.9
Expedient	5	55.6	4	44.4	9	29.1

Table 147. Percentage occurrence of curated and expedient artefacts from Mylouthkia, Building 200, phase 4, by condition.

Phase	Complete	Broken	Curated	Expedient	Total (cm)
1	11.11	6.39	7.1	10.39	8.93
2	9.36	5.66	6	9.27	7.33
3	18.58	6.26	11.4	9	10.98
4	8.96	4.57	3.2	10.43	6.22

Table 148. Showing longest dimension averages for complete, broken, curated and expedient artefacts from Mylouthkia, Building 200, by phase.

PHASE	DESCRIPTION
1	*construction* of hollow; clay lined pit floor and 3 postholes visible
2	*'midden' fill*: a layer of friable ashy silt, stratified in horizontal lenses and containing large concentrations of small stones, bones and sherdage
3.1	*'midden' fill & burial*: dense bands of compacted silicates (possibly from the deposition of organic material) with concentration of human bone at base.
3.2	*occupation & midden fill*: dense bands of compacted silicates (possibly from the deposition of organic material) associated with enlargement of Pit and presence of narrow ledge around the edge with 7 visible postholes. Covered by layer of possible constructional material.
4	*occupation &* burial: a compact (distinct) surface with two possible hearths and 4 postholes. Two disturbed 'burials'. Pit area and human remains covered by thick compacted layer.
5	*final ?occupation*: phase of activity in the pit immediately below the plough soil, including a possible hearth or fire pit.

Table 149. Main phases of activity in Mylouthkia, Pit 1.

PHASE	QUERNS/RUBBERS ETC.	CUTTING TOOLS	BEADS/PENDANTS	STOPPER/LID	NEEDLE/POINT	PERFORATED DISC	FIGURINE	POTTERY VESSEL	STONE VESSEL	OTHER
1-2	-	-	-	-	-	*	*	-	-	*
3	*	*	*	*	*	*	*	-	*	*
4	*	*	*	-	*	*	*	*	*	*
5	*	*	*	-	*	*	*	-	*	*
Total	*	*	*	*	*	*	*	*	*	*

Table 150. Presence/absence of main artefact classes by phase recovered from Mylouthkia, Pit 1.

	Complete		Broken		Total	
Functional Category	No.	%	No.	%	No.	%
Personal ornament	4	66.7	2	33.3	6	3.6
Heavy processing	14	58.3	10	41.7	24	14.5
Cutting tools	3	33.3	9	66.7	12	7.3
Textile production	7	30.6	27	79.4	34	20.6
Containing	-	-	30	100	30	18.2
Ideology/ritual	-	-	11	100	11	6.7
Other	2	9.7	46	90.3	48	29.1
Total	30	18.2	135	81.8	165	100

Table 151. Occurrence of artefacts recovered from Mylouthkia, Pit 1, by broad functional category and condition.

	Complete		Broken		Total	
Material	No.	%	No.	%	No.	%
Pottery	3	7	39	93	42	25.3
Stone	20	25	60	75	80	48.2
Bone	3	33.3	9	66.7	12	7.2
Antler	5	15.6	27	84.4	32	19.3
Total	31	18.7	135	81.3	166	100

Table 152. Occurrence of artefacts recovered from Mylouthkia, Pit 1, by material and condition.

	Complete		Broken		Total	
Functional Category	No.	%	No.	%	No.	%
Personal ornament	1	50	1	50	2	4.2
Heavy processing	5	71.4	2	28.6	7	14.5
Cutting tools	-	-	2	100	2	4.2
Textile production	3	27.3	8	72.7	11	22.9
Containing	-	-	10	100	10	20.8
Ideology/ritual	-	-	1	100	1	2.1
Other	-	-	15	100	15	31.3
Total	9	21.9	37	77.1	48	100

Table 153. Occurrence of artefacts recovered from Mylouthkia, Pit 1, phase 3, by broad functional category and condition.

	Complete		Broken		Total	
Material	No.	%	No.	%	No.	%
Pottery	2	16.7	10	83.3	12	25
Stone	5	21.7	18	78.3	23	47.9
Bone	-	-	1	100	1	2.1
Antler	2	16.7	10	83.3	12	25
Total	9	18.75	39	81.25	48	100

Table 154. Occurrence of artefacts recovered from Mylouthkia, Pit 1, phase 3, by material and condition.

	Complete		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)
Curated	1	6.7	14	93.3	15	46.9
Expedient	7	41.2	10	58.8	17	53.1

Table 155. Percentage occurrence of curated and expedient artefacts from Mylouthkia. Pit 1, phase 3, by condition.

	Complete		Broken		Total	
Functional Category	No.	%	No.	%	No.	%
Personal ornament	1	50	1	50	2	2.9
Heavy processing	6	46.1	7	53.9	13	19.1
Cutting tools	1	33.3	2	66.7	3	4.4
Textile production	2	20	8	80	10	14.7
Containing	-	-	15	100	15	22.1
Ideology/ritual	-	-	7	100	7	10.3
Other	2	10.1	16	88.9	18	26.5
Total	12	32.4	46	67.6	68	100

Table 156. Occurrence of artefacts recovered from Mylouthkia, Pit 1, phase 4, by broad functional category and condition.

	Complete		Broken		Total	
Material	No.	%	No.	%	No.	%
Pottery	-	-	19	100	19	27.9
Stone	8	13.5	26	76.5	34	50
Bone	2	33.3	4	66.7	6	8.9
Antler	1	11.1	8	88.9	9	13.2
Total	12	32.4	46	67.6	68	100

Table 157. Occurrence of artefacts recovered from Mylouthkia, Pit 1, phase 4, by material and condition.

	Complete		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)
Curated	6	17.1	29	82.9	35	63.6
Expedient	9	45	11	55	20	36.4

Table 158. Percentage occurrence of curated and expedient artefacts from Mylouthkia, Pit 1, phase 4, by condition.

	Complete		Broken		Total	
Functional Category	No.	%	No.	%	No.	%
Personal ornament	2	100	-	-	2	4.3
Heavy processing	3	75	1	25	4	8.5
Cutting tools	2	28.6	5	71.4	7	14.9
Textile production	3	23.1	10	76.9	13	27.7
Containing	-	-	5	100	5	10.5
Ideology/ritual	-	-	2	100	2	4.3
Other	-	-	14	100	14	29.8
Total	10	11.3	37	78.7	47	100

Table 159. Occurrence of artefacts recovered from Mylouthkia, Pit 1, phase 5, by broad functional category and condition.

	Complete		Broken		Total	
Material	No.	%	No.	%	No.	%
Pottery	1	11.1	8	88.9	9	19.1
Stone	5	12.7	17	77.3	22	46.8
Bone	1	20	4	80	5	10.7
Antler	2	18.2	9	81.8	11	23.4
Total	10	11.3	37	78.7	47	100

Table 160. Occurrence of artefacts recovered from Mylouthkia, Pit 1, phase 5, by material and condition.

	Complete		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)
Curated	7	29.2	17	70.8	24	64.9
Expedient	4	30.8	9	69.2	13	35.1

Table 161. Percentage occurrence of curated and expedient artefacts from Mylouthkia, Pit 1, phase 5, by condition.

Phase	Complete	Broken	Curated	Expedient	Total (cm)
3	8.09	6.28	6.48	10.55	6.8
4	10.12*	6.6	7.77	10.77	7.95
5	6.68	6.21	6.44	5.63	6.32

Table 162. Showing longest dimension averages for complete, broken, curated and expedient artefacts from Mylouthkia, Pit 1, by phase. (* = average is 11.86 when it includes a reconstructible vessel buried with skeleton).

PHASE	DESCRIPTION
1	*earlier pit*: partial remains of an earlier pit that had later been recut and largely removed.
2	*'midden' fill*: complex layer of ash, soil and havara lenses, patches of black material, bands of silicates, heat cracked stones and larger calcareous blocks throughout
3	*'midden' fill*: greatest surviving depth of deposits and proved the most productive of the recovered artefactual material. Upper level is a fairly sterile band of grey ashy soil with havara flecks. Lower level a softer, grey-brown soil with havara flecks, many finds and silicates/organics
4	*'midden' fill*: final phase of preserved activity in three separate but heavily eroded layers
5	a secondary pit which must either have cut or been cut by F16

Table 163. Main phases of activity in Mylouthkia, Pit 16

Phase	Querns/rubbers etc.	Cutting tools	Beads/Pendants	Awl/Needle	Perforated disc	Spindle whorl	Figurine	Pottery vessel	Stone vessel	Other
1	-	-	-	*	-	-	*	-	-	*
2	-	*	*	*	*	*	-	-	*	*
3	*	*	*	*	*	-	*	*	*	*
4	*	*	*	*	*	-	*	*	*	*
5	*	*	*	-	-	-	-	-	-	*
Total	*	*	*	*	*	*	*	*	*	*

Table 164. Presence/absence of main artefact classes by phase recovered from Mylouthkia, Pit 16.

	Complete		Broken		Total	
Functional Category	No.	%	No.	%	No.	%
Personal ornament	7	38.9	11	61.1	18	6.1
Heavy processing	58	57.4	43	42.6	101	34.5
Cutting tools	13	23.2	43	76.8	56	19.1
Textile production	4	11.8	30	88.2	34	11.6
Containing	9	33.3	18	66.7	27	9.2
Ideology/ritual	1	10	9	90	10	3.4
Other	3	16.7	44	83.3	47	16
Total	95	32.4	198	67.6	293	100

Table 165. Occurrence of artefacts recovered from Mylouthkia, Pit 16, by broad functional category and condition.

	Complete		Broken		Total	
Material	No.	%	No.	%	No.	%
Pottery	4	16.7	19	83.3	23	7.8
Stone	84	38.5	134	61.5	218	74.5
Bone	3	9.7	27	90.3	30	10.2
Antler	6	13.6	14	86.4	20	6.8
Other	1	50	1	50	2	0.7
Total	98	32.4	195	67.6	293	100

Table 166. Occurrence of artefacts recovered from Mylouthkia, Pit 16, by material and condition.

	Complete		Broken		Total	
Functional Category	No.	%	No.	%	No.	%
Personal ornament	1	25	3	75	4	17.4
Cutting tools	1	25	3	75	4	17.4
Textile production	1	10	9	90	10	43.5
Containing	1	100	-	-	1	4.3
Other	-	-	4	100	4	17.4
Total	4	17.4	19	82.6	23	100

Table 167. Occurrence of artefacts recovered from Mylouthkia, Pit 16, phase 2, by broad functional category and condition.

	Complete		Broken		Total	
Material	No.	%	No.	%	No.	%
Pottery	-	-	2	100	2	8.7
Stone	3	42.9	4	57.1	7	30.4
Bone	-	-	8	100	8	34.8
Antler	1	16.7	5	83.3	6	26.1
Total	4	17.4	19	82.6	23	100

Table 168. Occurrence of artefacts recovered from Mylouthkia, Pit 16, phase 2, by material and condition.

	Complete		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)
Curated	5	29.4	12	70.6	17	77.3
Expedient	1	20	4	80	5	22.7

Table 169. Percentage occurrence of curated and expedient artefacts from Mylouthkia, Pit 16, phase 2, by condition.

	Complete		Broken		Total	
Functional Category	No.	%	No.	%	No.	%
Personal Ornament	3	42.9	4	57.1	7	4.7
Heavy Processing	34	63	20	37	54	36.5
Cutting tools	4	14.8	23	85.2	27	18.2
Textile production	2	16.7	10	83.3	12	8.1
Containing	4	28.6	10	71.4	14	9.5
Ideology/ritual	-	-	6	100	6	4.1
Other	1	3.6	27	96.4	28	18.9
Total	48	32.4	100	67.6	148	100

Table 170. Occurrence of artefacts recovered from Mylouthkia, Pit 16, phase 3, by broad functional category and condition.

	Complete		Broken		Total	
Material	No.	%	No.	%	No.	%
Pottery	2	16.7	10	83.3	12	8.1
Stone	42	37.4	72	62.6	114	77
Bone	1	10	8	88.9	9	6.1
Antler	2	16.7	10	83.3	12	8.1
Other	1	100	-	-	1	0.7
Total	48	32.4	100	67.6	148	100

Table 171. Occurrence of artefacts recovered from Mylouthkia, Pit 16, phase 3, by material and condition.

	Complete		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)
Curated	21	25.9	60	74.1	81	65.3
Expedient	26	60.5	17	39.5	43	34.7

Table 172. Percentage occurrence of curated and expedient artefacts from Mylouthkia, Pit 16, phase 3, by condition.

	Complete		Broken		Total	
Functional Category	No.	%	No.	%	No.	%
Personal ornament	2	40	3	60	5	4.3
Heavy processing	24	53.3	21	46.7	45	38.8
Cutting tools	6	26.1	17	73.9	23	19.8
Textile production	1	8.3	11	91.7	12	10.4
Containing	4	33.3	8	66.7	12	10.4
Ideology/ritual	1	25	3	75	4	3.4
Other	2	13.3	13	86.7	15	12.9
Total	40	34.5	76	65.5	116	100

Table 173. Occurrence of artefacts recovered from Mylouthkia, Pit 16, phase 4, by broad functional category and condition.

	Complete		Broken		Total	
Material	No.	%	No.	%	No.	%
Pottery	2	22.2	7	77.8	9	7.8
Stone	36	29.1	56	60.9	92	79.3
Bone	2	15.4	11	84.6	13	11.2
Antler	-	-	2	100	2	1.7
Total	40	31	76	69	116	100

Table 174. Occurrence of artefacts recovered from Mylouthkia, Pit 16, phase 4, by material and condition.

	Complete		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)
Curated	17	27.4	45	72.6	62	59.6
Expedient	22	52.4	20	47.6	42	40.4

Table 175. Percentage occurrence of curated and expedient artefacts from Mylouthkia, Pit 16, phase 4, by condition.

Phase	Complete	Broken	Curated	Expedient	Total (cm)
2	7.83	4.06	5.33	2.5*	5.21
3	9.16	6.78	7.17	8.32	7.75
4	9.61	7.86	8.01	9.21	8.46

Table 176. Showing longest dimension averages for complete, broken, curated and expedient artefacts from Mylouthkia, Pit 16, by phase. (*=only one artefact of expedient kind)

	Complete		Broken		Total	
Functional Category	No.	%	No.	%	No.	%
Personal ornament	-	-	2	100	2	4.1
Heavy processing	14	63.6	8	26.7	22	44.9
Cutting tools	-	-	1	100	1	2
Textile production	1	14.3	6	85.7	7	14.3
Containing	-	-	6	100	6	12.2
Ideology/ritual	-	-	2	100	2	4.1
Other	1	11.1	8	88.9	9	18.4
Total	16	32.7	33	67.3	49	100

Table 177. Occurrence of artefacts recovered from Mylouthkia, Pit 24/28, by broad functional category and condition.

	Complete		Broken		Total	
Material	No.	%	No.	%	No.	%
Pottery	-	-	12	100	12	24.5
Stone	14	45.2	17	54.8	31	63.3
Bone	1	50	1	50	2	2
Antler	-	-	3	100	3	6.1
Metal	1	100	-	-	1	4.1
Total	16	32.7	33	67.3	49	100

Table 178. Occurrence of artefacts recovered from Mylouthkia, Pit 24/28, by material and condition.

	Complete		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)
Curated	5	31.2	11	68.8	16	40.9
Expedient	14	53.8	12	46.2	26	69.1

Table 179. Percentage occurrence of curated and expedient artefacts from Mylouthkia, Pits 24/28 by condition.

	Complete		Broken		Total	
Functional Category	No.	%	No.	%	No.	%
Heavy processing	7	50	7	50	14	38.8
Cutting tools	-	-	2	100	2	5.6
Textile production	1	33.3	2	66.7	3	8.3
Containing	1	14.3	6	85.7	7	19.4
Ideology/ritual	-	-	3	100	3	8.3
Other	-	-	7	100	7	19.4
Total	9	25	27	75	36	100

Table 180. Occurrence of artefacts recovered from Mylouthkia, Pit 100, by broad functional category and condition.

	Complete		Broken		Total	
Material	No.	%	No.	%	No.	%
Pottery	-	-	5	100	5	13.9
Stone	8	36.4	14	63.6	22	61.1
Bone	1	25	3	75	4	11.1
Antler	-	-	4	100	4	11.1
Total	9	25	27	75	36	100

Table 181. Occurrence of artefacts recovered from Mylouthkia, Pit 100, by material and condition.

	Complete		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)
Curated	3	16.7	15	83.3	18	54.6
Expedient	8	53.3	7	46.7	15	45.4

Table 182. Percentage occurrence of curated and expedient artefacts from Mylouthkia, Ditch 100, by condition.

	Complete		Broken		Total	
Functional Category	No.	%	No.	%	No.	%
Personal ornament	1	50	1	50	2	3.2
Heavy processing	17	46	20	54	37	57.7
Cutting tools	1	8.3	11	91.7	12	18.7
Textile production	-	-	1	100	1	1.6
Containing	-	-	6	100	6	9.4
Other	-	-	6	100	6	9.4
Total	19	29.7	45	70.3	64	100

Table 183. Occurrence of artefacts recovered from Mylouthkia, Ditch 105, by broad functional category and condition.

	Complete		Broken		Total	
Material	No.	%	No.	%	No.	%
Pottery	-	-	1	100	1	1.5
Stone	19	30.6	43	72.6	62	97
Bone	-	-	1	100	1	1.5
Total	19	29.7	45	70.3	64	100

Table 184. Occurrence of artefacts recovered from Mylouthkia, Ditch 105, by material and condition.

	Complete		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)
Curated	3	10.3	26	89.7	29	50
Expedient	12	41.4	15	58.6	29	50

Table 185. Percentage occurrence of curated and expedient artefacts from Mylouthkia, Ditch 105, by condition.

	Complete		Broken		Total	
Functional Category	No.	%	No.	%	No.	%
Heavy processing	6	75	2	25	8	66.7
Cutting tools	1	33.3	2	66.7	3	25
Containing	-	-	1	100	1	8.3
Total	7	58.33	5	41.67	12	100

Table 186. Occurrence of artefacts recovered from Mylouthkia, Ditch 106, by broad functional category and condition.

	Complete		Broken		Total	
Material	No.	%	No.	%	No.	%
Stone (Total)	7	58.33	5	41.67	12	100

Table 187. Occurrence of artefacts recovered from Mylouthkia, Ditch 106, by material and condition.

	Complete		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)
Curated	2	28.6	5	71.4	7	58.3
Expedient	5	100	-	-	5	41.7

Table 188. Percentage occurrence of curated and expedient artefacts from Mylouthkia, Ditch 106, by condition.

	Complete		Broken		Total	
Functional Category	No.	%	No.	%	No.	%
Heavy processing	8	30.7	18	69.3	26	53
Cutting tools	1	14.3	6	85.7	7	14.4
Textile production	-	-	1	100	1	2
Containing	1	10	9	90	10	20.4
Ideology/ritual	1	100	-	-	1	2
Other	1	25	3	75	4	8.2
Total	12	24.5	37	75.5	49	100

Table 189. Occurrence of artefacts recovered from Mylouthkia, Ditch 107, by broad functional category and condition.

	Complete		Broken		Total	
Material	No.	%	No.	%	No.	%
Pottery	-	-	3	100	3	6.1
Stone	12	26.1	34	73.9	46	93.9
Total	12	24.5	37	75.5	49	100

Table 190. Occurrence of artefacts recovered from Mylouthkia, Ditch 107, by material and condition.

	Complete		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)
Curated	4	16.7	20	83.3	24	53.2
Expedient	7	30.1	16	69.6	23	46.8

Table 191. Percentage occurrence of curated and expedient artefacts from Mylouthkia, Ditch 107, by condition.

Context	Querns/rubbers etc.	Cutting tools	Beads/pendants	Awl/needle	Perforated disc	Figurine	Lid/stopper	Pottery vessels	Stone vessels	Other
108.1	*	*	-	*	*	-	*	-	*	*
108.2	*	*	-	*	-	*?	-	*	-	*
108.3	-	-	-	-	*	-	-	-	*	-
Total	*	*	-	*	*	*	*	*	*	*

Table 192. Presence/absence of certain artefact types by context recovered from Mylouthkia, Pit 108.

	Complete		Broken		Total	
Functional Category	No.	%	No.	%	No.	%
Personal ornament	-	-	1	100	1	1
Heavy processing	19	29.6	29	60.4	48	49.5
Cutting tools	3	15	17	85	20	20.6
Textile production	-	-	1	100	1	1
Containing	1	7.1	13	92.9	14	14.4
Ideology/ritual	-	-	1	100	1	1
Other	3	13	9	87	12	12.4
Total	26	26.8	71	73.2	97	100

Table 193. Occurrence of artefacts recovered from Mylouthkia, Pit 108, by broad functional category and condition.

	Complete		Broken		Total	
Material	No.	%	No.	%	No.	%
Pottery	3*	33.3	6	66.7	9	9.3
Stone	23	26.7	63	73.3	86	88.7
Bone	-	-	1	100	1	1
Antler	-	-	1	100	1	1
Total	26	26.8	71	73.2	97	100

Table 194. Occurrence of artefacts recovered from Mylouthkia, Pit 108, by material and condition.

	Complete		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)
Curated	4	10.5	34	89.5	38	45.2
Expedient	21	45.7	25	54.3	46	54.8

Table 195. Percentage occurrence of curated and expedient artefacts from Mylouthkia, Pit 108, by condition.

Context	Querns/rubbers etc.	Cutting tools	Beads/Pendants	Awl/Needle	Perforated disc	Figurine	Lid/Stopper	Pottery vessel	Stone vessel	Other
0	*	*	-	-	-	-	-	-	*	*
1	*	-	-	-	-	-	-	-	*	-
2	*	-	-	-	*	*	-	-	*	-
3	*	-	-	-	-	*	-	*	*	-
4	*	*	-	-	-	*	-	-	*	-
6	*	*	-	-	-	*	-	-	-	*
7	*	-	-	-	*	-	-	-	-	*
8	*	*	-	-	-	-	-	-	*	-
Total	*	*	-	-	*	*	-	*	*	*

Table 196. Presence/absence of main artefact classes by phase recovered from Mylouthkia, Pit 109.

	Complete		Broken		Total	
Functional Category	No.	%	No.	%	No.	%
Heavy processing	33	47.8	37	52.2	70	57.3
Cutting tools	1	14.3	7	85.7	8	6.6
Containing	-	-	31	100	31	25.4
Ideology/ritual	1	20	4	80	5	4.1
Other	3	30	5	70	8	6.6
Total	38	31.1	84	68.9	122	100

Table 197. Occurrence of artefacts recovered from Mylouthkia, Pit 109, by broad functional category and condition.

	Complete		Broken		Total	
Material	No.	%	No.	%	No.	%
Pottery	2	28.6	5	71.4	7	5.7
Stone	36	31.3	79	68.7	115	94.3
Total	38	31.1	84	68.9	122	100

Table 198. Occurrence of artefacts recovered from Mylouthkia, Pit 109, by material and condition.

	Complete		Broken		Total	
	No.	(%)	No.	(%)	No.	(%)
Curated	3	5.8	49	94.2	52	42.6
Expedient	34	48.6	36	51.4	70	57.4

Table 199. Percentage occurrence of curated and expedient artefacts from Mylouthkia, Pit 109, by condition.

Context	Finds	Sherd s
Building 152	21	640
Building 200	338	4,798
Pit 1	166	17,434
Pit 16	293	9,044
Pit 24/28	49	2,562
Pit 100	36	1,392
Pit 105	64	1,494
Pit 106		326
Pit 107	49?	423
Pit 108	97	3,377
Pit 109	122	3,307

Table 200. Sherd and find counts for all analysed contexts from Mylouthkia

Context	Finds	Chipped stone	Sherds	Faunal remains
Building 152	21	214	640	56
Building 200	338	2,544	4,798	107
Pit 1	166	219	17,434	1037
Pit 16	293	1038	9,044	669
Pit 24/28	49	-	2,027	122
Pit 108	97	-	3,377	90
Pit 109	122	-	3,307	111

Table 201. Sherd, find, chipped stone and identifiable faunal remains counts for most productive contexts analysed from Mylouthkia.

Feature	Pit 1	Pit 1, phase 3	Pit 1, phase 4	Pit 1, phase 5	Pit 16	Pit 16, phase 2	Pit 16, phase 3	Pit 16, phase 4	Pit 24/28	Pit 100	Pit 105	Pit 108	Pit 109	B152	B200	B200, phase 1	B200, phase 2	B200, phase 3	B200, phase 4
Pit 1	-	-	-	-	65.7	54.2	73.3	62.5	63.6	72.6	45.4	51.9	50	51.4	58.4	53.4	52.9	58	62.9
Pit 1, phase 3	-	-	85.7	82.2	61.8	51	66.5	58.7	66.6	68.2	65.6	48.5	49.7	52	62.5	51.8	46.2	59.4	53.9
Pit 1, phase 4	-	85.7	-	71.8	67.8	44.7	73.6	63.5	68	79.1	76.2	54.3	56.3	55.3	74.4	56.1	52.2	64	60.1
Pit 1, phase 5	-	82.2	71.8	-	67.9	68.6	68.8	69.8	61.6	58.6	46.8	49.2	36.3	42.3	53	40.1	40	53.4	61.1
Pit 16	65.7	61.8	67.8	67.9	-	-	-	-	80.8	77.1	81.6	78.3	65.3	64.5	80	64.8	66.5	80	86.9
Pit 16, phase 2	54.2	51	44.7	68.6	-	-	51.9	49.3	39.2	35.7	35.9	36.1	22.1	26	45.4	54.4	31.4	52.9	61.8
Pit 16, phase 3	73.3	66.5	73.6	68.8	-	51.9	-	92.6	82.7	83.2	73.3	74.6	63.3	64.7	75.9	67.4	67.4	75.4	80.8
Pit 16, phase 4	62.5	58.7	63.5	69.8	-	49.3	92.6	-	82	80.5	81.2	84.9	65.9	67.2	82.2	70.3	70.2	78.4	79.6
Pit 24/28	63.6	66.6	68	61.6	80.8	39.2	82.7	82	-	83.9	70.5	74.4	69.8	79.6	70.3	72.5	73.2	63.4	74.1
Pit 100	72.6	68.2	79.1	58.6	77.1	35.7	83.2	80.5	83.9	-	64.8	73.2	74	72.1	77.1	80.1	67.6	68.1	70
Pit 105	45.4	68.6	76.2	46.8	81.6	35.9	73.3	81.2	70.5	64.8	-	88.5	69.9	79.8	73.4	87.6	86.4	67.4	66.2
Pit 108	51.9	48.5	54.3	49.2	78.3	36.1	74.6	84.9	74.4	73.2	88.5	-	79.1	77.1	70.6	83.2	80	69.7	66.4
Pit 109	50	49.7	56.3	36.3	65.3	22.1	63.3	65.9	69.8	74	69.9	79.1	-	78.1	72	89.7	89.3	65.5	53.2
B152	51.4	52	55.3	42.3	64.5	26	64.7	67.2	79.6	72.1	79.8	77.1	78.1	-	67.8	85.4	88.1	53.7	65.8
B200	58.4	62.5	62.8	53	80	45.4	75.9	82.2	70.3	77.1	73.4	70.6	72	67.8	-	-	-	-	-
B200, phase 1	53.4	51.8	56.1	40.1	64.8	54.4	67.4	70.3	72.5	80.1	87.6	83.2	89.7	85.4	-	-	91.2	65.9	66.1
B200, phase 2	52.9	46.2	52.2	40	66.5	31.4	67.4	70.2	73.2	67.6	86.4	80	89.3	88.1	-	91.2	-	64.7	66.2
B200. Phase 3	58	59.4	64.	53.4	80	52.9	75.4	78.4	63.4	68.1	67.4	69.7	65.5	53.7	-	65.9	64.7	-	76.7
B200, phase 4	62.9	53.9	60.1	61.1	86.9	61.8	80.8	79.6	74.1	70	66.2	66.4	53.2	65.8	-	66.1	66.2	76.7	-

Table 202. Robinson's coefficient of similarity for various building and pit contexts at Mylouthkia.